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ACME LANDFILL EXPANSION. APPENDICES.(U)
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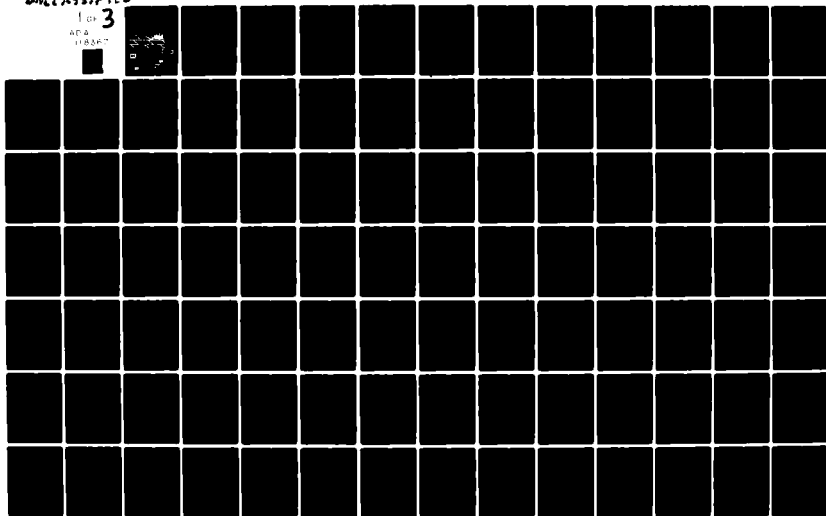
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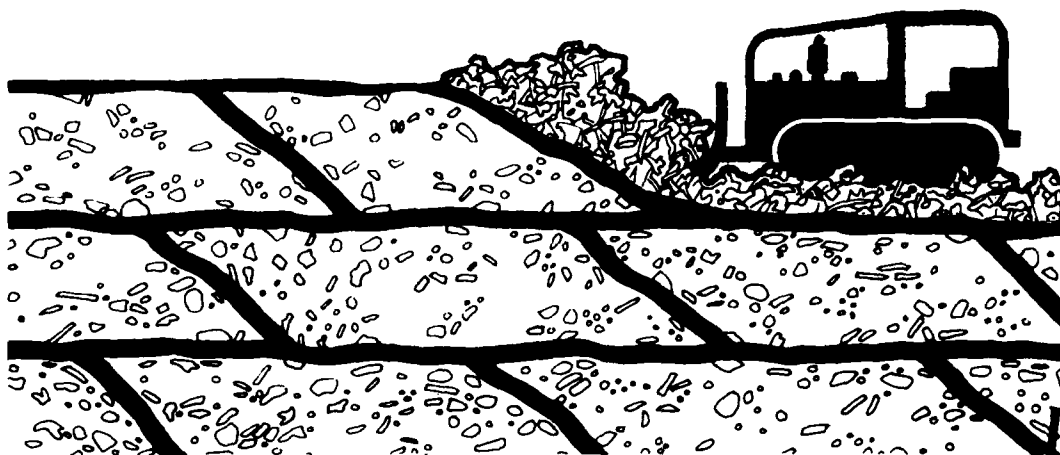
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Draft
Environmental Impact Report/
Environmental Impact Statement
APPENDICES

ACME LANDFILL EXPANSION



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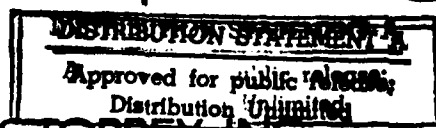
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US Army Corps
of Engineers
San Francisco District

Contra
Costa
County

Planning
Department



2T TORREY & TORREY INC.
environmental/urban planning and design

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ACME LANDFILL EXPANSION

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APPENDICES

CONTENTS

APPENDIX

A	Population, Housing, and Industry Data and Solid Waste Projections
B	Regulatory Permits
C	Earth
D	Water
E	Biota
F	Circulation and Traffic
G	Economics
H	Public Health and Safety
I	Resource Conservation and Recovery
J	Initial Study
K	Application for a Department of the Army Permit

APPENDIX A
POPULATION, HOUSING, AND INDUSTRY DATA
AND
SOLID WASTE PROJECTIONS

	<u>PAGE</u>
1. Projections of Population and Manufacturing Employees Service Area of Acme Fill 1980 - 2000	A-1
2. Population and Households, Contra Costa County April 1, 1980	A-2
3. Population and Housing Counts, Contra Costa County Cities, Unincorporated and total County 1970 and 1980	A-3
4. Population Projections Contra Costa County 1980 - 2000	A-4
5. Population Estimates Central Contra Costa County 1975-2000	A-5
6. Industry Employment, Contra Costa County	A-6
7. "Future Projections of Waste Quantities", <u>Economics Report</u> prepared by Reed V. Schmidt, Consulting Economist and submitted to Torrey & Torrey, Inc. for the Joint Environmental Impact Report/Environmental Statement Acme Fill Corporation, 24 March 1982. pp. 18, 20 through 23 and 25 and 26.	A-7

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TABLE

PROJECTIONS OF POPULATION AND MANUFACTURING EMPLOYEES
SERVICE AREA OF ACME FILL*

1980 - 2000

<u>YEAR</u>	<u>POPULATION</u>	<u>PERCENT INCREASE FIVE-YEAR PERIOD</u>	<u>AVG. ANNUAL PERCENT CHANG</u>
1980	435,600	-	-
1985	492,600	13.1	2.5
1990	543,300	10.3	2.0
1995	576,800	6.2	1.2
2000	602,600	4.5	0.9

<u>YEAR</u>	<u>MANUFACTURING EMPLOYEES</u>	<u>PERCENT INCREASE FIVE-YEAR PERIOD</u>	<u>AVG. ANNUAL PERCENT CHANGE</u>
1980	13,800	-	-
1985	14,200	2.9	0.6
1990	14,600	2.8	0.6
1995	14,800	1.4	0.3
2000	15,000	1.4	0.3

*Includes Benicia (Solano County).

NOTE: Projections do not take into account 1980 Census data.

SOURCE: ABAG, Solid Waste Facilities Study, December 1979.

TABLE

POPULATION A' HOUSEHOLDS
CONTRA COSTA COUNTY
APRIL 1, 1980

	<u>Total Population</u>	<u>Persons in Households</u>	<u>Persons in Group Quarters</u>	<u>Total Housing Units</u>	<u>Total Households</u>	<u>Vacancy Rate</u>	<u>Persons per Household</u>
Antioch	43,559	43,263	296	15,937	15,227	4.46	2.84
Brenwood	4,434	4,408	26	1,597	1,532	4.07	2.88
Clayton	4,325	4,325	-	1,377	1,329	3.49	3.25
Concord	103,251	102,295	956	39,489	38,151	3.39	2.68
El Cerrito	22,731	22,686	45	9,856	9,660	1.99	2.35
Hercules	5,963	5,963	-	1,843	1,753	4.88	3.40
Lafayette	20,879	20,708	171	8,077	7,822	3.16	2.65
Martinez	22,582	22,038	544	8,844	8,437	4.60	2.61
Moraga	15,014	14,126	888	4,986	4,873	2.27	2.90
Pinole	14,253	14,239	14	5,067	4,897	3.36	2.91
Pittsburg	33,034	32,947	87	11,927	11,087	7.04	2.97
Pleasant Hill	25,124	24,652	472	10,140	9,771	3.64	2.52
Richmond	74,676	74,126	550	29,082	28,107	3.35	2.64
San Pablo	19,750	19,376	374	8,356	7,948	4.88	2.44
Walnut Creek	53,643	52,905	738	24,405	23,287	4.17	2.26
Unincorporated	<u>194,034</u>	<u>192,352</u>	<u>1,682</u>	<u>71,120</u>	<u>67,824</u>	<u>4.63</u>	<u>2.84</u>
Total County	<u>657,252</u>	<u>650,409</u>	<u>6,843</u>	<u>252,226</u>	<u>241,805</u>	<u>4.13</u>	<u>2.69</u>

Source: U. S. Department of Commerce, Bureau of the Census:
1980 Census of Population and Housing.

NOTE: These are advance counts. As of March 1982, this was the most current data. Final total population: 656,380.

TABLE
POPULATION AND HOUSING COUNTS
CONTRA COSTA COUNTY
CITIES, UNINCORPORATED AND TOTAL COUNTY

	1970 and 1980			
	1970 Population	1980 Population	Percent Change 1970-1980 Population	Percent Change 1970-1980 Housing Units
Antioch	28,060	43,559	55.2%	15,937
Brentwood	2,649	4,434	67.4	1,597
Clayton	1,385	4,325	212.3	354
Concord	85,164	103,251	21.2	25,479
El Cerrito	25,190	22,731	-9.8	9,251
Hercules	252	5,963	2,266.3	88
Lafayette	20,484	20,879	1.9	6,606
Martinez	16,506	22,582	36.8	5,470
Moraga *	11,327	15,014	32.6	3,016
Pinole	13,266	14,253	7.4	3,785
Pittsburg	21,423	33,034	55.2	11,927
Pleasant Hill	24,610	25,124	2.1	10,140
Richmond	79,043	74,676	-5.5	29,082
San Pablo	21,461	19,750	-8.0	8,356
Walnut Creek	39,844	53,643	34.6	24,405
Unincorporated Area	165,452	194,034	17.2	71,120
County Total	556,116	657,252	18.2%	252,226
				41.9%

* Moraga was unincorporated in 1970. The figures for 1970 are estimated from census tract totals.

Source: U. S. Department of Commerce, Bureau of the Census:
1970 Census of Population and Housing
1980 Census of Population and Housing

TABLE

POPULATION PROJECTIONS
CONTRA COSTA COUNTY
1980 - 2000

<u>YEAR</u>	<u>POPULATION</u>	<u>PERCENT INCREASE FIVE-YEAR PERIOD</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>
1980	639,700	---	---
1985	712,700	11.4	2.2
1990	775,100	8.8	1.7
1995	818,600	5.6	1.1
2000	853,500	4.3	0.9

NOTE: These estimates do not reflect 1980 census data.

SOURCE: ABAG computer program, 1980. Based on ABAG, Projections 79,
 April 1979.

TABLE

POPULATION ESTIMATES
CENTRAL CONTRA COSTA COUNTY
1975-2000

<u>YEAR</u>	<u>POPULATION</u>	<u>PERCENT INCREASE TOTAL CHANGE</u>	<u>AVERAGE ANNUAL PERCENT INCREASE</u>
1975	320,445	---	---
1980	372,900	16.4	3.1
1990	443,700	19.0	1.8
2000	487,000	9.8	1.0

NOTE: These estimates do not reflect 1980 census data

SOURCES: 1975: Contra Costa County Planning Department,
Special Census, 1975.

1980-2000: ABAG, Solid Waste Facilities Study,
December 1979.

TABLE
INDUSTRY EMPLOYMENT^{a/}
CONTRA COSTA COUNTY

<u>INDUSTRY</u>	<u>1972</u>	<u>1978</u>	<u>1980</u>	<u>1982</u>	<u>1985</u>
Mining	0.2	0.4	0.4	0.4	0.4
Construction	9.3	12.1	12.6	13.2	14.8
Manufacturing	25.0	26.4	27.4	28.1	29.2
Transportation and Public Utilities	9.3	10.4	10.3	11.0	11.9
Wholesale trade	5.9	7.4	7.8	8.3	9.0
Retail trade	27.2	42.0	45.1	49.2	55.5
Finance, insurance and real estate	5.4	10.1	12.0	13.7	16.1
Services	<u>23.7</u>	<u>34.3</u>	<u>37.3</u>	<u>40.9</u>	<u>46.5</u>
TOTAL FOR COUNTY	<u>106.0</u>	<u>143.1</u>	<u>152.9</u>	<u>164.8</u>	<u>183.4</u>

^{a/} Employment reported by place of work; does not include persons employed in government, agriculture, or veterinary, animal, or landscape services.

SOURCE: Private Industry Council, Contra Costa County. Data compiled and projections made as of September 1980.

Future Projections of Waste Quantities

As part of their 1980 Solid Waste Facilities Study, ABAG made future projections of solid waste quantities for various collection areas within Contra Costa County. The projection methodology was based on projections of population and manufacturing employees, which were performed as part of Projections 79, and estimates of generation rates for residential/commercial, industrial (non-hazardous), and construction/demolition types of solid wastes.

Collection areas were designated as areas served by refuse collectors. These areas were determined by using existing franchise boundaries and projected "spheres of influence" for future expansion of refuse service. Map A shows assumed boundaries of collection areas in the County. Landfill used for collection areas is shown within parentheses beneath collection area identification. Acme's service area encompasses generally central Contra Costa County, plus Antioch, Rodeo Sanitary District, and Benicia in Solano County.

In order to make estimates of the solid waste quantities that can be expected in the Acme service area during the next 20 years, the estimates for individual collection areas going to Acme were totaled.

The first step in projecting solid waste quantities was to derive estimates of population in Acme's service area for 1980-2000. They are presented in Table 9. Also, estimates of manufacturing employees are shown in Table 9. These estimates are the totals for the collection areas in Contra Costa County and the collection area in Benicia (Solano County) being served by Acme landfill.

Generation factors for residential/commercial wastes were based on data presented in Survey of Solid Waste Quantity and Composition in the San Francisco Bay Area, prepared by SCS Engineers in 1978. The generation factor used for the residential/commercial type for Contra Costa County for 1980 was 3.7 pounds per day (per person). For Benicia it was 4.9 pounds per day. The unit generation factor was assumed to grow at annual rate of one percent. For non-hazardous industrial wastes, generation factors were based on waste quantities estimated in the 1977 County Solid Waste Management Plan and in Bay Area Solid Waste Management Project -- Phase I, February 1977. For 1980 the industrial generation factor used for Contra Costa County was 15.9 pounds per day (per manufacturing employee). For Benicia it was 23.6 pounds per day. Unit generation factors for industrial wastes were

TABLE 9

PROJECTIONS OF POPULATION AND MANUFACTURING EMPLOYEES
SERVICE AREA OF ACME FILL*

1980 - 2000

<u>YEAR</u>	<u>POPULATION</u>	<u>PERCENT INCREASE FIVE-YEAR PERIOD</u>	<u>AVG. ANNUAL PERCENT CHANGE</u>
1980	435,600	-	-
1985	492,600	13.1	2.5
1990	543,300	10.3	2.0
1995	576,800	6.2	1.2
2000	602,600	4.5	0.9

<u>YEAR</u>	<u>MANUFACTURING EMPLOYEES</u>	<u>PERCENT INCREASE FIVE-YEAR PERIOD</u>	<u>AVG. ANNUAL PERCENT CHANGE</u>
1980	13,800	-	-
1985	14,200	2.9	0.6
1990	14,600	2.8	0.6
1995	14,800	1.4	0.3
2000	15,000	1.4	0.3

*Includes Benicia (Solano County).

NOTE: Projections do not take into account 1980 Census data.

SOURCE: ABAG, Solid Waste Facilities Study, December 1979.

assumed to be constant throughout the 1980-2000 period.. Construction/demolition waste unit generation factors were based upon waste quantities estimated in the 1977 County Solid Waste Management Plan and population figures from ABAG Series 3 projections. For 1980 the construction/demolition unit factor used for Contra Costa County was 1.0 pound per day (per person) and for Benicia 0.6 pound per day. These generation factors were assumed to be constant throughout the projection period.

For Acme's service area solid waste quantities in terms of tons per day (seven-day week) were projected for the 1980-2000 period and are presented in Table 10. These projections of solid waste quantities include those from all collection areas in Contra Costa County disposing at Acme landfill and imports from Benicia in Solano County. Estimated quantities for residential/commerical, industrial (non-hazardous), and construction/demolition wastes were computed by means of the projection methodology just described.

As shown in the CoSWMP, the County Public Works Department estimates that 100 TPD of Group 1 wastes (hazardous) are disposed at Acme. It was assumed by the Department that this amount remains constant throughout the 1980-2000 period. The Group 1 wastes going to Acme are limited types of solids or semi-solids. Table 11 lists the Group 1 wastes received by Acme. These wastes are mixed with Group 2 wastes in the landfill.

TABLE 10
PROJECTED FUTURE WASTE QUANTITIES
SERVICE AREA OF ACME FILL*

1980 - 2000
(TONS PER DAY)**

TYPE	1980	1985	1990	1995	2000
Residential/Commercial	815	975	1,133	1,260	1,378
Industrial (Non-Hazardous)	114	118	122	125	126
Construction/Demolition	215	242	266	283	295
Group I Wastes (Hazardous)	100	100	100	100	100
Sewage Sludge	100	115	115	115	115
TOTAL	<u>1,344</u>	<u>1,550</u>	<u>1,736</u>	<u>1,883</u>	<u>2,014</u>

Percent Change	15.3%	12.0%	8.5%	7.0%
Average Annual Percent Change	2.9%	2.3%	1.6%	1.4%

* Includes imports from Benicia (Solano County).

** Based on Seven-day week.

SOURCES: ABAG, Solid Waste Facilities Study, Dec. 1979.
Contra Costa County, Public Works Department, County Solid Waste Management Plan,
Final Draft, December 1981, with revisions made January 1982.

Moreover, in the CoSWMP, the Public Works Department estimates that 100 TPD (dry solids) of sewage sludge (25 percent solids) from Central Contra Costa Sanitary District went to Acme in 1980. They expect this amount to increase to 115 TPD in 1985 and to remain constant thereafter.

Life Expectancy of Acme Fill

Table 12 reveals the estimated life expectancy of Acme landfill under six different scenarios and the waste quantities projections in Table 10. These estimates and scenarios appear in the CoSWMP. There are several possibilities of final site configurations depending on the ability of Acme Fill to secure the necessary permits to expand its operation. Map B shows the areas described in the six scenarios, which are the following:

1. Use of existing operation area of 125 acres, only (Area A)
2. Use of existing operation area; plus use of a portion of the 178-acre southern parcel, sloping away from the existing hills. (Areas A and B)
3. Use of existing operation area; plus use of the 200-acre parcel, less 40 acres for dredge spoil. (Areas A and C)
4. Use of existing operation area; plus use of the 200-acre parcel, less 40 acres for dredge spoil, and plus use of a portion of the 178-acre southern parcel, sloping away from the existing hills. (Areas A, B, and C)
5. Use of existing operation area; plus use of the 200-acre parcel, less 40 acres for dredge spoil, and plus use of a portion of the 178-acre southern parcel filling against the existing hills. (Areas A, B, C, and D)
6. Use of existing operation area; plus use of the full 200-acre parcel; plus use of a portion of the 178-acre southern parcel filling against the existing hills; and plus use of two adjacent properties not owned by Acme. (Areas A, B, C, D, E, and F)

TABLE 12
ESTIMATED LIFE EXPECTANCY

ACME FILL
1980-1995

No Energy Recovery or Recycling

SCENARIO	LANDFILL AREA	1 9 8 0			1 9 8 5			1 9 9 0			1 9 9 5 ^{a/}		
		Remaining Capacity (Tons)	Percent Filled (%)	a/ (%)	Remaining Capacity (Tons)	Percent Filled (%)		Remaining Capacity (Tons)	Percent Filled (%)		Remaining Capacity (Tons)	Percent Filled (%)	
No. 1	A	832,000	—	—	Filled in 1981	100%							
No. 2	A & B	1,829,000	—	—	Filled in 1983	100							
No. 3	A & C	4,179,000	—	—	1,552,000	63	Filled in 1987						
No. 4	A, B & C	5,176,000	—	—	2,549,000	51	Filled in 1989						
No. 5	A, B, C & D	5,923,000	—	—	3,296,000	44	325,000	Filled in 1990	95				
No. 6	A, B, C, D, E, & F	8,531,000	—	—	5,904,000	31	2,933,000	Filled in 1994	66				

a/ Percentage calculated using 1980 as base year.

b/ In 1993 solid wastes from the Contra Costa Waste Sanitary Landfill and Pittsburg Landfill are diverted to Acme Fill.

c/ Includes imports from Benicia

SOURCES: ABAG Computer Program, 1980

Contra Costa County, Public Works Department, County Solid Waste Management Plan, Final Draft,

December 1981, with revisions made January 1982. Table 8-6

APPENDIX B
REGULATORY PERMITS

	<u>PAGE</u>
1. California Department of Health Services Interim Status Document CAD 04183569	B-1
2. California Regional Water Quality Control Board San Francisco Bay Region Waste Discharge Requirement Order No. 76-37 Acme Fill Corporation, Acme Sanitary Landfill, Martinez	B-42
3. California Regional Water Quality control Board San Francisco Bay Region Self-Monitoring Program Acme Sanitary Landfill, Martinez, Contra Costa County	B-51
4. California Regional Water Quality Control Board San Francisco Bay Region Revised Self Monitoring Program Acme Sanitary Landfill, Martinez, Contra Costa County	B-67
5. Contra Costa County Board of Supervisors Land Use Permit LUP 615-60 Issued: 2 December 1958 Amended: 19 April 1960	B-78
6. Property Descriptions and Map LUP 2052-81 7 July 1981 Limit and Conditions of Approval	B-97
7. Contra Costa County, Department of Health Services Solid Waste Facilities Permit 07-AA-002 Approved: 4 December 1981 State Solid Waste Management Board Issued: 9 December 1981 Contra Costa County Department of Health Services	B-100
8. County Counsel's Office Memorandum to Nancy Fahden from John B. Clausen, County Counsel Re: Excavation and Grading by Acme Fill 10 July 1981	B-107
9. Environmental Protection Agency Identification Number CAD 04183569	B-109

DEPARTMENT OF HEALTH SERVICES

14744 P STREET
SACRAMENTO, CA 95814

Facility: Acme Fill Corporation
End of Arthur Road
Contra Costa County
Martinez, CA 94553

INTERIM STATUS DOCUMENT

Number: CAD 041835695

Effective Date: October 23, 1981

Operator: Acme Landfill
P.O. Box 23164
Pleasant Hill, CA 94523

Pursuant to Section 25200.5 of the California Health and Safety Code,
this Interim Status Document is hereby granted to Acme Landfill subject to
the conditions set forth in Attachment A which by this reference is
incorporated herein.

A handwritten signature in cursive script that reads "Harvey R. Collins".

Harvey R. Collins, Ph. D., Chief
Environmental Health Branch

ATTACHMENT A

Interim Status Document

Acme Fill Corporation
End of Arthur Road
Contra Costa County
Martinez, CA 94553

I. GENERAL CONDITIONS

1. Identification and general responsibilities of operator.

Acme Landfill, hereinafter called the operator and/or owner, shall comply with the provisions of the California Health and Safety Code, including Chapter 6.5 of Division 20, and with the Minimum Standards for Management of Hazardous and Extremely Hazardous Wastes (Chapter 30, Division 4, Title 22 of the California Administrative Code). The following requirements set forth in Chapter 30, Division 4, Title 22, California Administrative Code, should be particularly noted:

- (a) The owner or operator shall ensure that the operation of the facility will not imperil public health and safety, wildlife, domestic livestock, or the environment.
- (b) The owner or operator shall allow the California State Department of Health Services or the local health agency to inspect the facility, take samples of wastes, and inspect pertinent records.
- (c) The owner or operator shall maintain the qualified personnel and the equipment necessary to provide for the safe operation of the facility.
- (d) The owner or operator shall notify the California State Department of Health Services of a proposed change in ownership of the facility, in the method of operation of the facility, or of proposed closure of the facility 30 days prior to such event.
- (e) The operator shall report to the California State Department of Health Services, within 24 hours after occurrence, all accidents involving hazardous wastes which resulted in, or could have resulted in, a hazard to public health and safety, wildlife, domestic livestock, or to the environment.

2. Records.

The owner or operator shall file this Interim Status Document at the facility and at his place of business.

3. Operation plan.

Unless he has already done so, the owner or operator shall submit to the California State Department of Health Services within six months after receiving specific written notice from the Department to do so, an operation plan in accordance with Section 66376, Title 22 of the California Administrative Code.

4. Prohibited acts.

The owner or operator shall not do any of the following acts:

- (a) Treat, store, or dispose of hazardous wastes which are not identified.
- (b) Employ processes not described in the application.
- (c) Make substantial modifications or additions to the facility.

5. Limitation.

The owner or operator shall comply with the conditions of this document and with any new or modified conditions which the California State Department of Health Services deems necessary to protect public health or the environment. A new interim status condition or a modification of an existing interim status condition shall become effective on the date that written notice of such change is received by the owner or operator.

NOTE: Unless explicitly stated otherwise, all cross references to items in this Interim Status Document shall refer only to items occurring within the same Part. All Parts are identified by Roman numerals. The items set forth in each Part shall apply to the owner, operator, and/or facility in addition to the items set forth in any preceding and/or following Part of this document.

II. SPECIAL CONDITIONS

1. Disposal by landfilling.

- (a) Hazardous waste shall not be buried in areas which are potentially subject to slides, slippage, or erosion, or which are otherwise geologically unstable.
- (b) Hazardous waste which is to be buried shall be covered within 24 hours of deposition into a burial area with six inches of compacted impermeable soil. The final cover in a burial area shall consist of at least three feet of compacted impermeable soil. Sufficient measures such as diversion ditches for the control of surface water, rip-rap to prevent erosion, or any other requirements of the California Regional Water Quality Control Board to prevent ponding, erosion or downstream sedimentation shall be implemented immediately after application of the final cover.
- (c) Extremely hazardous wastes, flammable wastes, and strong oxidizers shall not be applied directly to the working face of the landfill. Such wastes shall be deposited behind the working face in trenches or wells.

2. Management of powdered wastes.

To prevent hazardous waste from being blown by the wind, hazardous waste in the form of powder, dust or a fine solid shall be handled, treated, stored and disposed of in covered containers or, if the waste is not water reactive, shall be wetted as a slurry.

3. Management of asbestos wastes.

Asbestos-containing wastes shall be managed in accordance with the following instructions:

- (a) Wastes in sealed, nonreturnable containers shall be handled, disposed of, and covered without opening, breaking, or rupturing the containers.
- (b) Wetted wastes in bulk shall not be allowed to dry to such a state that airborne asbestos fibers would result.
- (c) Dry wastes in bulk shall be thoroughly wetted to prevent the blowing of asbestos fibers.
- (d) All asbestos-containing wastes destined for disposal at the facility shall be covered with at least six inches of compacted soil or nonhazardous solid waste within 24 hours after receipt at the disposal area or site.

4. Wastes prohibited.

Hazardous wastes described below shall not be handled at the facility:

- (a) Burning wastes.
- (b) Forbidden and Class A explosives as defined in Sections 173.51 and 173.53, Title 49, Code of Federal Regulations.

5. Management of incompatible wastes.

Each of the following categories of incompatible hazardous wastes shall be adequately separated during all handling, storage, and disposal operations:

- (a) Alkalies and cyanides.
- (b) Acids.
- (c) Strong oxidizers.

6. Nonpotable water supply.

If an onsite water supply is used for controlling dust and fires, cleaning equipment or other purposes, and does not meet all health standards for drinking water, all faucets or taps connected to that supply shall be clearly labeled in English, "Polluted-Not Safe For Human Use", and Spanish, "Peligro, Contaminacion, No Usar".

7. Public water supply.

If a public water supply is used at the facility, the service connection shall be protected from contamination as specified in Section 7604, Title 17 of the California Administrative Code.

8. Fencing.

The perimeter of the hazardous waste area of the facility shall be secured by a well-maintained fence, capable of preventing the intrusion of livestock and of discouraging entry by unauthorized persons. If the entire facility is appropriately fenced, if the general public does not have access to the hazardous waste area, and if the hazardous waste area is posted with warning signs as described elsewhere in this document, no additional fence shall be required around the hazardous area unless the absence of such a fence could result in a hazard to health, safety, or the environment.

9. Operation at night.

When the facility is operated during hours of darkness, the operator shall provide sufficient lighting to ensure safe, effective management of hazardous wastes.

10. Telephone or radio communications.

A telephone or radio for summoning aid in the event of an emergency shall be in workable condition and available for immediate use by personnel working in the hazardous waste area of the facility.

11. First-aid kit.

The owner or operator shall provide to personnel working in the hazardous waste area of the facility adequate numbers of industrial-type first-aid kits. The kits shall be maintained and available for immediate use.

12. Protective clothing.

The owner or operator shall provide to personnel working in the hazardous waste area of the facility adequate numbers of the following National Institute of Occupational Safety and Health (NIOSH) approved equipment if appropriate:

- (a) Protective head gear and face masks.
- (b) Chemically resistant apparel and gloves.
- (c) Self-contained breathing apparatus and respirators with the approved cartridges.

13. Recordkeeping and reporting.

The owner or operator shall:

- (a) Require that a manifest be completed for all hazardous wastes accepted and send legible copies to the California State Department of Health Services on a monthly basis.
- (b) Pay fees for disposal of hazardous waste in conformance with Article 8, Chapter 30, Division 4, Title 22 of the California Administrative Code.
- (c) Submit to the California State Department of Health Services by the last day of each month:

- (1) A report showing the amount of fees due and payable to the Department for the previous month.
- (2) Information on hazardous waste delivered to him during the previous month other than by pipeline, consisting of a legible copy of the completed manifest for each load of hazardous waste accepted, and a report that summarizes the numbers of loads of hazardous waste received, disposed of on land and applied to land. A copy of the monthly operator report to the California Regional Water Quality Control Board may, with appropriate modifications, be used for the report.
- (3) If applicable, information on hazardous waste delivered to him during the previous month by pipeline, consisting of a record of each hazardous waste disposed of during the previous month, showing the identity, source, chemical composition, weight or volume, physical state, hazardous properties and method used to dispose of each waste.

14. Prohibition on landfill expansion

- (a) Hazardous wastes shall not be disposed of on any portion of the facility which was not actually and lawfully used for the disposal of hazardous waste as of August 6, 1980, and which is situated within 2,000 feet of:
 - (1) A residence for use as permanently occupied human habitation;
 - (2) A hospital for humans;
 - (3) A school for persons under 21 years of age;
 - (4) A day care center for children; or
 - (5) Any permanently occupied human habitation other than those used for industrial purposes.
- (b) This prohibition specifically applies, but may not be limited to:
 - (1) The 22-acre area which is a portion of the southern parcel, bordered by the Martinez Gun Club on the north and the Pacheco Creek Channel on the east;
 - (2) The portion of the 200-acre area, a part of the northern parcel, now awaiting U.S. Army Corps of Engineers' approval which is situated within 2,000 feet of any of the land uses listed above; and

- (3) The previously used Class I hazardous waste ponds situated southeast of the IT Corporation property and west of the Pacheco Creek Channel, which is situated within 2,000 feet of any of the uses listed above.

III. SAFETY, EQUIPMENT, AND EMERGENCY RESPONSE

1. Identification number.

The facility owner or operator shall have an identification number issued by the U.S. Environmental Protection Agency (EPA).

2. Notices.

- (a) If the owner or operator has arranged to receive hazardous waste from a foreign source, he shall notify the California State Department of Health Services in writing at least four weeks in advance of the date that the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.
- (b) Before transferring ownership or operation of the facility during its operating life or during the post-closure care period, the owner or operator shall notify the new owner or operator in writing of the conditions of this document.

3. Analysis of waste.

- (a)
 - (1) Before the owner or operator treats, stores, or disposes of a particular type of hazardous waste for the first time, he shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis shall contain all the information which must be known to treat, store, or dispose of the waste in accordance with the conditions of this document.
 - (2) The analysis may include data developed for other purposes, and existing published or documented data on the hazardous waste or on waste generated from similar processes.
 - (3) The analysis shall be repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed.
- (b) Upon the effective date of this document, the owner or operator shall follow a written waste analysis plan which describes the procedures which will be used to comply with Item 3 (a). The plan shall be subject to approval by the California State Department of Health Services and shall be kept at the facility. At a minimum, the plan shall specify:

- (1) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters;
- (2) The test methods which will be used to test for these parameters;
- (3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:
 - (i) One of the sampling methods described in Appendix I, Part 261, Title 40, Code of Federal Regulations; or
 - (ii) An equivalent sampling method approved by the California State Department of Health Services.
- (4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date;
- (5) Where applicable, the methods which will be used to meet any additional waste analysis requirements for specific waste management methods as specified elsewhere in this document.

4. Security.

- (a) The owner or operator shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility.
- (b) The facility shall have:
 - (1) A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or
 - (2) (i) An artificial or natural barrier which completely surrounds the active portion of the facility and which would prevent unauthorized entry; and
 - (ii) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

- (c) Upon the effective date of this document, a sign with the legend, "Caution - Hazardous Waste Area - Unauthorized Persons Keep Out," shall be posted at each entrance to the active portion of the facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend shall be written in English and Spanish, "Cuidado! Zona De Residuos Peligrosos. Prohibida La Entrada A Personas No Autorizadas", and shall be legible from a distance of at least 25 feet. Existing signs with a legend other than "Caution - Hazardous Waste Area - Unauthorized Persons Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

5. Inspections.

- (a) The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing--or may lead to--release of hazardous waste constituents to the environment or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.
- (b) (1) The owner or operator shall follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
- (2) The schedule shall be subject to approval by the California State Department of Health Services.
- (3) He shall keep this schedule at the facility.
- (4) The schedule shall identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
- (5) The frequency of inspection may vary for the items on the schedule. However, it shall be based on the rate of

possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies called for elsewhere in this document.

- (c) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which shall be subject to approval by the California State Department of Health Services and which shall ensure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.
- (d) The owner or operator shall record inspections in an inspection log or summary. He shall keep these records for at least three years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

6. Personnel training.

- (a) (1) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the conditions of this document. The owner or operator shall ensure that this program includes all the elements described under Item 6 (a)(3).
- (2) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- (3) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:
 - (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - (ii) Key parameters for automatic waste feed cut-off systems;

- (iii) Communications or alarm systems;
 - (iv) Response to fires or explosions;
 - (v) Response to ground-water contamination incidents;
and
 - (vi) Shutdown of operations.
- (b) Facility personnel shall have successfully completed the program required in Item 6 (a) by the effective date of this document or within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of this document shall not work in unsupervised positions until they have completed the training requirements of Item 6 (a).
- (c) Facility personnel shall take part in an annual review of the initial training required in Item 6 (a).
- (d) The owner or operator shall maintain the following documents and records at the facility:
- (1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.
 - (2) A written job description for each position listed under Item 6 (d)(1). This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;
 - (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under Item 6 (d) (1); and
 - (4) Records that document that the training or job experience required under Items 6 (a), (b), and (c) has been given to, and completed by, facility personnel.
- (e) Training records on current personnel as required in Item 6 (d) 4 shall be kept until closure of the facility. Training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

7. Ignitable, reactive, or incompatible wastes.

- (a) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction. While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.
- (b) The treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials shall be conducted so that it does not:
 - (1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - (2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
 - (3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
 - (4) Damage the structural integrity of the device or facility containing the waste; or
 - (5) Through other like means threaten human health or the environment.

8. Maintenance and operation of facility.

The facility shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

9. Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to ensure its proper operation in time of emergency.

10. Required aisle space.

The owner or operator shall maintain aisle space as needed to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.

11. Arrangements with local authorities.

(a) Upon the effective date of this document, the owner or operator shall attempt to make the following arrangements, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator shall document the refusal in the operating record.

12. Purpose and implementation of contingency plan.

(a) Upon the effective date of this document, the owner or operator shall have a contingency plan for the facility. The contingency plan shall be subject to approval by the California State Department of Health Services and shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

- (b) The provisions of the plan shall be carried out immediately wherever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

13. Content of contingency plan.

- (a) The contingency plan shall describe the actions facility personnel shall take to comply with Items 12 and 17 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.
- (b) If the owner or operator has already prepared some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the conditions of this document.
- (c) The plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to Item 13.
- (d) The plan shall list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see Item 18), and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates.
- (e) The plan shall include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- (f) The plan shall include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous wastes or fires).

14. Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan shall be:

- (a) Maintained at the facility; and
- (b) Submitted to the California State Department of Health Services and to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

15. Amendment of contingency plan.

The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

- (a) Applicable regulations are revised;
- (b) The plan fails in an emergency;
- (c) The list of emergency coordinators changes; or
- (d) The list of emergency equipment changes.

16. Emergency coordinator.

At all times, there shall be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

17. Emergency procedures.

- (a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) shall:
 - (1) Immediately activate internal facility alarms or communication systems, where applicable, to notify all facility personnel;
 - (2) Immediately notify appropriate State or local agencies with designated response roles if their help is needed; and
 - (3) Notify the California State Department of Health Services by telephone or telegraph within 24 hours of occurrence.

- (b) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. This may be done by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- (c) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).
- (d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, the findings shall be reported as follows:
 - (1) The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under Part 1510, Title 40, Code of Federal Regulations), or the National Response Center (using their 24-hour toll free number: 800/424-8802). The report shall include:
 - (i) Name and telephone number of reporter;
 - (ii) Name and address of facility;
 - (iii) Time and type of incident (e.g., release, fire);
 - (iv) Name and quantity of material(s) involved, to the extent known;
 - (v) The extent of injuries, if any; and
 - (vi) The possible hazards to human health, or the environment, outside the facility.
 - (2) If his assessment indicates that evacuation of local areas may be advisable, appropriate local authorities shall be notified immediately. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.
- (e) During an emergency the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous

waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

- (f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- (g) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
- (h) The emergency coordinator shall ensure that, in the affected area(s) of the facility:
 - (1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
 - (2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- (i) The owner or operator shall notify the California State Department of Health Services and local authorities, that the facility is in compliance with Item 17 (h) before operations are resumed in the affected area(s) of the facility.
- (j) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 30 days after the incident, he shall submit a written report on the incident to the California State Department of Health Services. The report shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident (e.g., fire, explosion);
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;

- (6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- (7) Estimated quantity and disposition of recovered material that resulted from the incident.

IV. RECORDKEEPING

1. Operating record.

- (a) The owner or operator shall keep a written operating record at the facility.
- (b) The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility:
 - (1) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility;
 - (2) The location of each hazardous waste within the facility and the quantity at each location. This information shall include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;
 - (3) Records and results of waste analyses and trial tests performed;
 - (4) Summary reports and details of all incidents that require implementing the contingency plan;
 - (5) Records and results of inspections (except these data need be kept only three years);
 - (6) Monitoring, testing or analytical data where required; and
 - (7) All closure cost estimates.

2. Availability, retention, and disposition of records.

- (a) All records including plans, required in this document shall be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the California State Department of Health Services who is duly designated by the Director;
- (b) The retention period for all records required in this document is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the California State Department of Health Services;

- (c) A copy of records of waste disposal locations and quantities in Item 1 (b)(2) shall be submitted to the California State Department of Health Services and local land authority upon closure of the facility.

3. Annual report.

The owner or operator shall prepare and submit a single copy of an annual report to the California State Department of Health Services by March 1 of each year beginning March 1, 1982. The annual report shall cover facility activities during the previous calendar year and shall include the following information:

- (a) The EPA identification number, name, and address of the facility;
- (b) The calendar year covered by the report;
- (c) A description and the quantity of each hazardous waste the facility received during the year;
- (d) The method of treatment, storage, or disposal for each hazardous waste;
- (e) Monitoring data where required;
- (f) The most recent closure cost estimate;
- (g) The certification signed by the owner or operator of the facility or his authorized representative.

4. Additional reports.

In addition to submitting the annual report required in Item 3, the owner or operator shall also report to the California State Department of Health Services:

- (a) Releases, fires, and explosions;
- (b) Ground-water contamination and monitoring data;
- (c) Facility closure.

V. CLOSURE

1. Closure.

The owner or operator shall close his facility in a manner that: (a) minimizes the need for further maintenance, and (b) controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground water, or surface waters, or to the atmosphere.

2. Closure plan and amendment of plan.

- (a) The owner or operator shall have a written closure plan. This plan shall be subject to approval by the California Regional Water Quality Control Board and shall be kept at the facility. This plan shall identify the steps necessary to close the facility completely at any point during its intended life and at the end of its intended life. The closure plan shall include, at least:
 - (1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed. The description shall identify the maximum extent of the operation which will be unclosed during the life of the facility, and how Item 1 and other applicable conditions of this document will be met;
 - (2) An estimate of the maximum inventory of wastes in storage or in treatment at any given time during the life of the facility;
 - (3) A description of the steps needed to decontaminate facility equipment during closure; and
 - (4) A schedule for final closure which shall include, as a minimum, the anticipated date when wastes will no longer be received, the date when completion of final closure is anticipated, and intervening milestone dates which will allow tracking of the progress of closure. (For example, the expected date for completing treatment or disposal of waste inventory shall be included, as must the planned date for removing any residual wastes from storage facilities and treatment processes.)

- (b) The owner or operator may amend his closure plan at any time during the active life of the facility. (The active life of the facility is that period during which wastes are periodically received.) The owner or operator shall amend his plan any time changes in operating plans or facility design affect the closure plan.
- (c) The owner or operator shall submit his closure plan to the California Regional Water Quality Control Board at least 180 days before the date he expects to begin closure. The California Regional Water Quality Control Board will modify, approve, or disapprove the plan within 90 days of receipt and after providing the owner or operator and the affected public (through a newspaper notice) the opportunity to submit written comments.

3. Time allowed for closure.

- (a) Within 90 days after receiving the final volume of hazardous wastes, the owner or operator shall treat all hazardous wastes in storage or in treatment, or remove them from the site, or dispose of them on-site, in accordance with the approved closure plan.
- (b) The owner or operator shall complete closure activities in accordance with the approved closure plan and within six months after receiving the final volume of wastes. The California Regional Water Quality Control Board may approve a longer closure period under Item 2 (c) if the owner or operator can demonstrate that: (1) the required or planned closure activities will, of necessity, take him longer than six months to complete, and (2) that he has taken all steps to eliminate any significant threat to human health and the environment from the unclosed but inactive facility.

4. Disposal or decontamination of equipment.

When closure is completed, all facility equipment and structures shall have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

5. Certification of closure.

When closure is completed, the owner or operator shall submit to the California Regional Water Quality Control Board certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

VI. FINANCIAL RESPONSIBILITY

1. Cost estimate for facility closure.

- (a) The owner or operator shall have a written estimate of the cost of closing the facility in accordance with the applicable closure requirements of this document. The owner or operator shall keep this estimate, and all subsequent estimates, at the facility. The estimate shall equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.
- (b) The owner or operator shall prepare a new closure cost estimate whenever a change in the closure plan affects the cost of closure.
- (c) On each anniversary of the effective date of this document, the owner or operator shall adjust the latest closure cost estimate using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor shall be calculated by dividing the latest published annual Deflator by the Deflator for the previous year. The result is the inflation factor. The adjusted closure cost estimate shall equal the latest closure cost estimate (see Item 1(b)) times the inflation factor.

VII. OFF-SITE FACILITY

1. Analysis of waste.

- (a) The owner or operator shall follow a written waste analysis plan which shall be subject to approval by the California State Department of Health Services and which shall specify the waste analyses that hazardous waste generators have agreed to supply.
- (b) The waste analysis plan required in Item 1 (a) shall also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest. At a minimum, the plan must describe:
 - (1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and
 - (2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.
- (c) Before the owner or operator treats, stores, or disposes of a particular type of hazardous waste for the first time, he shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis shall contain all the information which must be known to treat, store, or dispose of the waste in accordance with the conditions of this document.
- (d) The analysis shall be repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated when the results of the inspection required in Item 1(e) indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest.
- (e) The owner or operator shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest.

2. Use of manifest.

The owner or operator, or his agent, shall:

- (a) Require that a manifest be completed for all hazardous waste accepted.

- (b) Inspect wastes before accepting them to ensure that the delivered waste has essentially the same general properties as identified by the generator on the manifest;
- (c) Complete the appropriate section of the manifest.
- (d) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
- (e) Note any significant discrepancies in the manifest on each copy of the manifest;
- (f) Immediately give the transporter at least one copy of the signed manifest;
- (g) Send legible copies of all completed hazardous waste manifests to the California State Department of Health Services on a monthly basis in conformance with Section 66550, Title 22, California Administrative Code;
- (h) Within 30 days after delivery, send a copy of the manifest to the generator; and
- (i) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

3. Manifest discrepancies.

Upon discovering a significant discrepancy between the quantity or type of hazardous waste designated on the manifest and the quantity or type of hazardous waste a facility actually receives, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). Significant discrepancies in quantity are: (1) for bulk waste, variations greater than 10 percent in weight, and (2) for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest. If the facility can accept the waste after its actual identity is revealed, the owner or operator may accept the waste. If the facility cannot accept the waste, the owner or operator shall immediately notify the California State Department of Health Services of that fact, identify the transporter and generator of the waste, and refuse to accept the waste. If the owner or operator can accept the waste, he shall note, on the copy of the manifest which he submits to the California State Department of Health Services and on the copy which he retains, how the discrepancy was resolved. If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator shall immediately submit to the California State Department of Health Services a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest at issue.

4. Annual report.

The owner or operator shall prepare an annual report (as described elsewhere in this document) which shall include:

- (a) The EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report shall give the name and address of the foreign generator; and
- (b) A description and the quantity of each hazardous waste, which the facility received during the year, listed by EPA identification number of each generator.

5. Unmanifested waste report.

If the facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, and if the waste is not excluded from the manifest requirement, then the owner or operator shall prepare and submit a single copy of a report to the California State Department of Health Services within 15 days after receiving the waste. The report shall include the following information:

- (a) The EPA identification number, name, and address of the facility;
- (b) The date the facility received the waste;
- (c) The EPA identification number, name, and address of the generator and the transporter, if available;
- (d) A description and the quantity of each unmanifested hazardous waste the facility received;
- (e) The method of treatment, storage, or disposal for each hazardous waste;
- (f) The certification signed by the owner or operator of the facility or his authorized representative; and
- (g) A brief explanation of why the waste was unmanifested, if known.

VIII. GROUND-WATER MONITORING

1. Ground-water monitoring.

(a) Effective November 19, 1981, the owner or operator shall implement a ground-water monitoring program which is capable of determining the facility's impact on the quality of ground water in the uppermost aquifer underlying the facility. A ground-water monitoring system shall be part of the ground-water monitoring program. The ground-water monitoring system shall be capable of yielding ground-water samples for analysis, and shall consist of:

(1) Monitoring wells (at least one) installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the waste management area. Their number, locations, and depths shall be sufficient to yield ground-water samples that are:

(i) Representative of background ground-water quality in the uppermost aquifer near the facility; and

(ii) Not affected by the facility; and

(2) Monitoring wells (at least three) installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the waste management area. Their number, locations, and depths shall ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

(b) All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing shall be screened or perforated, and packed with gravel or sand where necessary, to enable sample collection at depths where appropriate aquifer flow zones exist. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth shall be sealed with a suitable material (e.g., cement grout or bentonite slurry) to prevent contamination of samples and the ground water.

2. Sampling and analysis.

(a) The owner or operator shall obtain and analyze samples from the installed groundwater monitoring system. The owner or operator shall follow a ground-water sampling and analysis plan. The plan shall be subject to approval by the California State Department of Health Services and shall be kept at the facility. The plan shall include procedures and techniques for:

- (1) Sample collection;
 - (2) Sample preservation and shipment;
 - (3) Analytical procedures; and
 - (4) Chain of custody control.
- (b) The owner or operator shall determine the concentration or value of the following parameters in ground-water samples in accordance with Item 2(c) and (d):
- (1) Parameters characterizing the suitability of the ground water as a drinking water supply as specified by EPA in Appendix III, Part 265, Title 40, Code of Federal Regulations.
 - (2) Parameters establishing ground-water quality:
 - (i) Chloride
 - (ii) Iron
 - (iii) Manganese
 - (iv) Phenols
 - (v) Sodium
 - (vi) Sulfate
 - (3) Parameters used as indicators of ground-water contamination:
 - (i) pH
 - (ii) Specific Conductance
 - (iii) Total Organic Carbon
 - (iv) Total Organic Halogen
- (c) (1) For all monitoring wells, the owner or operator shall establish initial background concentrations or values of all parameters specified in Item 2(b). This shall be done quarterly for one year.
- (2) For each of the indicator parameters specified in Item 2(b)(3), at least four replicate measurements shall be obtained for each sample and the initial background arithmetic mean and variance shall be determined by pooling the replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.
- (d) After the first year, all monitoring wells shall be sampled and the samples analyzed with the following frequencies:
- (1) Samples collected to establish ground-water quality shall be obtained and analyzed for the parameters specified in Item 2(b)(2) at least annually.
 - (2) Samples collected to indicate ground-water contamination shall be obtained and analyzed for the parameters specified in Item 2(b)(3) at least semi-annually.

- (e) Elevation of the ground-water surface at each monitoring well shall be determined each time a sample is obtained.

3. Preparation, evaluation, and response.

- () By November 19, 1981, the owner or operator shall prepare an outline of a ground-water quality assessment program. The outline shall describe a more comprehensive ground-water monitoring program (than that described in Items 1 and 2) capable of determining:
 - (1) Whether hazardous waste or hazardous waste constituents have entered the ground water.
 - (2) The rate and extent of migration of hazardous waste or hazardous waste constituents in the ground water; and
 - (3) The concentrations of hazardous waste or hazardous waste constituents in the ground water.
- (b) For each indicator parameter specified in Item 2(b)(3), the owner or operator shall calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample, for each well monitored in accordance with Item 2(d)(2), and compare these results with its initial background arithmetic mean. The comparison shall consider individually each of the wells in the monitoring system, and shall use the Student's t-test at the 0.01 level of significance to determine statistically significant increases (and decreases, in the case of pH) over initial background.
- (c)
 - (1) If the comparisons for the upgradient wells made under Item 3(b) show a significant increase (or pH decrease), the owner or operator shall submit this information in accordance with Item 4(a)(2)(ii).
 - (2) If the comparisons for downgradient wells made under Item 3(b) show a significant increase (or pH decrease), the owner or operator shall immediately obtain additional ground-water samples from those downgradient wells where a significant difference was detected, split the samples in two, and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.
- (d)
 - (1) If the analyses performed under Item 3(c)(2) confirm the significant increase (or pH decrease), the owner or operator shall provide written notice to the California Regional Water Quality Control Board within seven days of the date of such confirmation, that the facility may be affecting ground-water quality.

- (2) Within 15 days after the notification under Item 3(d)(1), the owner or operator shall develop and submit to the California Regional Water Quality Control Board for approval a specific plan, based on the outline required under Item 3(a) and certified by a qualified geologist or geotechnical engineer, for a ground-water quality assessment program at the facility.
- (3) The plan to be submitted under Item 3(d)(2) shall specify:
 - (i) The number, location, and depth of wells;
 - (ii) Sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;
 - (iii) Evaluation procedures, including any use of previously gathered ground-water quality information; and
 - (iv) A schedule of implementation.
- (4) The owner or operator shall implement the ground-water quality assessment plan which satisfies Item 3(d)(3), and, at a minimum, determine:
 - (i) The rate and extent of migration of the hazardous waste or hazardous waste constituents in the ground water; and
 - (ii) The concentrations of the hazardous waste or hazardous waste constituents in the ground water.
- (5) The owner or operator shall make the first determination under Item 3(d)(4) as soon as technically feasible, and, within 15 days after that determination, submit to the California Regional Water Quality Control Board a written report containing an assessment of the ground-water quality.
- (6) If the owner or operator determines, based on the results of the first determination under Item 3(d)(4), that no hazardous waste or hazardous waste constituents from the facility have entered the ground water, the indicator evaluation program described in Item 2 and Item 3(b) shall be reinstated. When the owner or operator reinstates the indicator evaluation program he shall notify the California Regional Water Quality Control Board in the report submitted under Item 3(d)(5).
- (7) If the owner or operator determines, based on the first determination under Item 3(d)(4), that hazardous waste or hazardous waste constituents from the facility have entered the ground water, then:

- (i) The determinations required under Item 3(d)(4) shall continue to be made on a quarterly basis until final closure of the facility, if the ground-water quality assessment plan was implemented prior to final closure of the facility; or
 - (ii) The determinations required under Item 3(d)(4), may cease to be made if the ground-water quality assessment plan was implemented during the post-closure care period.
- (e) Any ground-water quality assessment to satisfy the requirements of Item 3(d)(4) which is initiated prior to final closure of the facility shall be completed and reported in accordance with Item 3(d)(5).
 - (f) Unless the ground water is monitored to satisfy Item 3(d)(4), at least annually the owner or operator shall evaluate the data on ground-water surface elevations obtained under Item 2(e) to determine whether the requirements under Item 1(a) for locating the monitoring wells continues to be satisfied. If the evaluation shows that Item 1(a) is no longer satisfied, the owner or operator shall immediately modify the number, location, or depth of the monitoring wells to bring the ground-water monitoring system into compliance with this condition.

4. Recordkeeping and reporting.

- (a) Unless the ground water is monitored to satisfy the requirements of Item 3(d)(4), the owner or operator shall:
 - (1) Keep records of the analyses required in Item 2(c) and (d), the associated ground-water surface elevations required in Item 2(e), and the evaluations required in Item 3(b) throughout the active life of the facility; and
 - (2) Report the following ground-water monitoring information to the California Regional Water Quality Control Board:
 - (i) During the first year when initial background concentrations are being established for the facility: Concentrations or values of the parameters listed in Item 2(b)(1) for each ground-water monitoring well within 15 days after completing each quarterly analysis. The owner or operator shall separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels specified by EPA in Appendix III, Part 265, Title 40, Code of Federal Regulations.

- (ii) Annually: Concentrations or values of the parameters listed in Item 2(b)(3) for each ground-water monitoring well, along with the required evaluations for these parameters under Item 3(b). The owner or operator shall separately identify any significant differences from initial background found in the upgradient wells, in accordance with Item 3(c)(-). During the active life of the facility, this information shall be submitted as part of the annual report required elsewhere in this document.
 - (iii) As a part of the annual report required elsewhere in this document: Results of the evaluation of ground-water surface elevations under Item 3(f), and a description of the response to that evaluation, where applicable.
- (b) If the ground water is monitored to satisfy Item 3(d)(4), the owner or operator shall:
- (1) Keep records of the analyses and evaluations specified in the plan, which satisfies Item 3(d)(3), throughout the active life of the facility; and
 - (2) Annually, until final closure of the facility, submit to the California Regional Water Quality Control Board a report containing the results of his ground-water quality assessment program which includes, but is not limited to, the calculated (or measured) rate of migration of hazardous waste or hazardous waste constituents in the ground water during the reporting period. This report shall be submitted as part of the annual report required elsewhere in this document.

5. Waiver

The foregoing conditions may be waived if the owner or operator can demonstrate in writing to the satisfaction of the California Regional Water Quality Control Board that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells or to surface water.

IX. DISPOSAL SITE

1. Operating record.

The owner or operator shall maintain in the written operating record at his facility the following information until closure of the facility:

- (a) The location and quantity of each hazardous waste recorded on a map or diagram of each cell or disposal area; and
- (b) All post-closure cost estimates.

2. Annual report.

The owner or operator shall include in his annual report to the California State Department of Health Services by March 1 of each year except 1981 the most recent post-closure cost estimate.

3. Recordkeeping and reporting.

- (a) Unless the owner or operator has implemented a satisfactory ground-water quality assessment plan as specified elsewhere in this document, he shall keep records of required analyses of monitoring samples and associated ground-water surface elevations, as well as required evaluations throughout the post-closure care period.
- (b) If the ground water is monitored in accordance with a satisfactory ground-water quality assessment plan, the owner or operator shall keep records of analyses and elevations specified in the plan throughout the post-closure care period.

4. Post-closure care and use of property; period of care.

- (a) Post-closure care shall consist of at least:

- (1) Ground-water monitoring and reporting; and
- (2) Maintenance of monitoring and waste containment systems.

- (b) The California Regional Water Quality Control Board may require maintenance of any or all of the security conditions in Item 4, Part III of this document during the post-closure period, when:

- (1) Wastes may remain exposed after completion of closure; or
 - (2) Short term, incidental access by the public or domestic livestock may pose a hazard to human health.
- (c) Post-closure use of the property on or in which hazardous waste remains after closure shall never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the owner or operator can demonstrate to the California Regional Water Quality Control Board either in the post-closure plan or by petition, that the disturbance:
- (1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or
 - (2) Is necessary to reduce a threat to human health or the environment.
- (d) The owner or operator shall provide post-closure care in accordance with the approved post-closure plan for at least 30 years after the date of completing closure. However, the owner or operator may petition the California Regional Water Quality Control Board to allow some or all of the requirements for post-closure care to be discontinued or altered before the end of the 30-year period. The petition shall include evidence demonstrating the secure nature of the facility that makes continuing the specified post-closure requirement(s) unnecessary (e.g., no detected leaks and none likely to occur, characteristics of the waste, application of advanced technology, or alternative disposal, treatment, or re-use techniques). Alternately, the California Regional Water Quality Control Board may require the owner or operator to continue one or more of the post-closure care and maintenance requirements contained in the facility's post-closure plan for a specified period of time. The California Regional Water Quality Control Board may do this if they find there has been noncompliance with any applicable standards or requirements, or that such continuation is necessary to protect human health or the environment. At the end of the specified period of time, the California Regional Water Quality Control Board will determine whether to continue or terminate post-closure care and maintenance at the facility. The owner or operator may petition the California Regional Water Quality Control Board for an extension or reduction of the post-closure care period based on cause. These petitions will be considered by the California Regional Water Quality Control Board at the time the post-closure plan is submitted and at five-year intervals after the completion of closure.

5. Post-closure plan; amendment of plan.

- (a) The owner or operator shall have a written post-closure plan. He shall keep this plan at the facility. This plan shall identify the activities which will be carried on after final closure and the frequency of those activities. The post-closure plan shall include at least:
 - (1) Ground-water monitoring activities and frequencies as specified elsewhere in this document for the post-closure period; and
 - (2) Maintenance activities and frequencies to ensure:
 - (1) the integrity of the cap and final cover or other containment structures as specified elsewhere in this document, and (2) the function of the facility's monitoring equipment.
- (b) The owner or operator may amend his post-closure plan at any time during the active life of the disposal facility or during the post-closure care period. The owner or operator shall amend his plan any time changes in operating plans or facilities design affect his post-closure plan.
- (c) The owner or operator shall submit his post-closure plan to the California Regional Water Quality Control Board at least 180 days before the date he expects to begin closure. The California Regional Water Quality Control Board will modify or approve the plan within 90 days of receipt and after providing the owner or operator and the affected public (through a newspaper notice) the opportunity to submit written comments. The plan may be modified to include security equipment maintenance under Item 4(b). Any amendments to the plan under Item 5(b) which occur after approval of the plan shall also be approved by the California Regional Water Quality Control Board before they may be implemented.

6. Notice to local land authority.

Within 90 days after closure is completed, the owner or operator shall submit to the local land authority and to the California Regional Water Quality Control Board a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. This plat shall be prepared and certified by a professional land surveyor. The plat filed with the local land authority shall contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the site as specified in Item 4(c). In addition, the owner or operator shall submit to the California Regional Water Quality Control Board, and to the local land authority a record of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility. For wastes disposed of before the effective date of this document, the owner or operator shall identify the type, location, and quantity of the wastes to the best of his knowledge and in accordance with any records he has kept.

7. Notice in deed to property.

The owner of the property on which the facility is located shall record, in accordance with California law, a notation on the deed to the facility property--or on some other instrument which is normally examined during title search--that will in perpetuity notify any potential purchaser of the property that: (1) the land has been used to manage hazardous waste, and (2) its use is restricted under Item 4(c).

8. Cost estimate for post-closure monitoring and maintenance.

- (a) The owner or operator shall have a written estimate of the annual cost of post-closure monitoring and maintenance of the facility. The owner or operator shall keep this estimate, and all subsequent estimates required in this Item, at the facility.
- (b) The owner or operator shall prepare a new annual post-closure cost estimate whenever a change in the post-closure plan affects the cost of post-closure care. The latest post-closure cost estimate is calculated by multiplying the latest annual post-closure cost estimate by 30.
- (c) Annually during the operating life of the facility, the owner or operator shall adjust the latest post-closure cost estimate using the inflation factor calculated as described elsewhere in this document. The adjusted post-closure cost estimate shall equal the latest post-closure cost estimate times the inflation factor.

X. LANDFILL

1. Operation.

- (a) By November 19, 1981, run-on shall be diverted away from the active portions of the landfill;
- (b) By November 19, 1981, run-off from active portions of the landfill shall be collected.
- (c) The owner or operator shall cover or otherwise manage the landfill so that wind dispersal of hazardous waste is prevented.

2. Surveying and recordkeeping.

The owner or operator shall maintain the following items in the operating record:

- (a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
- (b) The contents of each cell and the approximate location of each hazardous waste type within each cell.

3. Closure and post-closure.

- (a) The owner or operator shall place a final cover over the landfill, and the closure plan shall specify the function and design of the cover. In the post-closure plan, the owner or operator shall include the post-closure care requirements of Item 3(d).
- (b) In the closure and post-closure plans, the owner or operator shall address the following objectives and indicate how they will be achieved:
 - (1) Control of pollutant migration from the facility via ground water, surface water, and air;
 - (2) Control of surface water infiltration, including prevention of pooling; and
 - (3) Prevention of erosion.
- (c) The owner or operator shall consider at least the following factors in addressing the closure and post-closure care objectives of Item 3(b):
 - (1) Type and amount of hazardous waste and hazardous waste constituents in the landfill;

- (2) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;
 - (3) Site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to ground water, surface water, and drinking water sources);
 - (4) Climate, including amount, frequency, and pH of precipitation;
 - (5) Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover; and
 - (6) Geological and soil profiles and surface and subsurface hydrology of the site.
- (d) During the post-closure care period, the owner or operator shall:
- (1) Maintain the function and integrity of the final cover as specified in the approved closure plan;
 - (2) Maintain and monitor any leachate collection, removal, and treatment system to prevent excess accumulation of leachate in the system;
 - (3) Maintain and monitor any gas collection and control system to control the vertical and horizontal escape of gases;
 - (4) Protect and maintain surveyed benchmarks; and
 - (5) Restrict access to the landfill as appropriate for its post-closure use.

4. Liquid waste.

- (a) Bulk or non-containerized liquid waste or waste containing free liquids shall not be placed in the landfill, unless:
- (1) The landfill liner is chemically and physically resistant to the added liquid, and the leachate collection and removal system functions and has a capacity sufficient to remove all leachate produced; or
 - (2) Before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with an absorbent solid), so that free liquids are no longer present.

(b) By November 19, 1981, a container holding liquid waste or waste containing free liquids shall not be placed in the landfill, unless:

- (1) The container is designed to hold liquids or free liquids for a use other than storage, such as a battery or capacitor; or
- (2) The container is very small, such as an apple.

5. Containers.

By November 19, 1981, any empty container shall be crushed, or similarly reduced in volume before it is buried beneath the surface of the landfill.

6. Ignitable or reactive waste.

Ignitable or reactive waste shall not be placed in the landfill, unless the waste is treated, rendered, or mixed before or immediately after placement in the landfill so that the resulting waste, mixture, or dissolution of material is no longer ignitable or reactive and Item 7(b), Part III of this document is complied with.

7. Incompatible wastes.

Incompatible wastes, or incompatible wastes and materials shall not be placed in the same landfill cell, unless Item 7(b), Part III of this document is complied with,

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION
1111 JACKSON STREET, ROOM 6040
OAKLAND 94607

Phone: Area Code 415
464-1255



Certified Mail No. 909129
Return Receipt Requested

Date: April 28, 1976

File No.: 2119.1067 (MHK)

Acme Fill Corp.
P. O. Box 1108
Martinez, CA 94553

Gentlemen:

NOTICE: The item(s) indicated by an "X" are enclosed herewith:

- ☒ A. One certified copy of an Order adopted by the Board on the date shown therein.
- ☐ B. Attachment to Order containing Requirements and Recommendations of other agencies.
- ☐ C. One copy of Executive Officer Summary Report which was considered by the Board on the date shown therein. The Motion(s) recommended therein was (were) adopted by the Regional Board on that date.
- ☒ D. Other - Self-Monitoring Program.

Sincerely,


FRED H. DIERKER
Executive Officer

FHD/tmh

Enclosure:

Order No. 76-37 w/Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 76-37

WASTE DISCHARGE REQUIREMENTS FOR:

ACME FILL CORPORATION
ACME SANITARY LANDFILL
MARTINEZ, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Acme Fill Corporation, hereinafter called the discharger, submitted a report of waste discharge dated September 14, 1973 for its Acme Sanitary Landfill and a site evaluation prepared by Harding-Lawson Associates dated May 8, 1975.
2. The discharger proposes to operate, improve and maintain the existing sanitary landfill for the disposal of Group 2 and 3 wastes, and certain types of Group 1 wastes as described in Attachment A, which is incorporated herein and made a part of this Order.
3. The site is located at the end of Arthur Road near Martinez, and is bounded by Waterfront Road to the north, rolling hills to the west, and Pacheco Slough and Walnut Creek to the south and east, as shown in Attachments B and C which are incorporated herein and made a part of this Order. The site consists of 480 acres and is divided into northerly and southerly parcels separated by lands not owned by the discharger. Only a portion of the northerly parcel has been used for waste disposal to date.
4. The northern parcel covers about 310 acres and is underlaid by weak compressible, peaty and silty marsh deposits of very low permeability commonly known as bay mud. The bay mud varies in thickness from 4 to 62 feet and is underlaid by relative incompressible moderately strong silts and clays of low permeability. Minor amounts of peat as well as sand and fine gravel lenses are found at the site. The southerly 170 acres parcel is underlaid by alluvial clayey silt and soft compressible marsh deposits. An active fault known as "Concord Fault" crosses the eastern side of the site.
5. Surface water is limited to rain falling on the site and runoff from a truck washing area. No useable groundwater exists beneath the site. The impermeable bay mud which underlies the site is generally saturated to depths of about three to 10 feet.
6. The beneficial uses of Pacheco Slough and Walnut Creek are:
 - a. Habitat and resting for waterfowl
 - b. Fish habitat
 - c. Recreation
 - d. Esthetic enjoyment

7. The area within 1000 feet of the site includes a petroleum refinery, Pacheco Slough and Walnut Creek, some residences and a Class I waste disposal site.
8. The Board adopted the Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the water quality objectives stated in that Plan.
9. This disposal site, subsequent to modifications required to comply with this Order, will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a Class II-1 Disposal Site suitable to receive Group 2 and Group 3 wastes and limited Group 1 wastes.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this site.
11. The Board in a public meeting heard and considered all comments pertaining to the site.

IT IS HEREBY ORDERED, that Acme Fill Corporation and any other person that operates this site shall comply with the following:

A. Waste Disposal Specifications

1. The treatment or disposal of waste shall not cause pollution or a nuisance.
2. Waste material shall not be disposed of at any place where it can be carried from the disposal site and discharged into waters of the State.
3. The discharge of Group 1 wastes at this site shall be limited to the materials described on Attachment A and such other wastes as may be authorized in writing by the Executive Officer.
4. All Group 1 wastes shall be covered or buried with Group 2 wastes daily and no Group 1 wastes shall be placed within 100 feet of the Concord Fault.
5. Group 1 or 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
6. Liquid wastes or high moisture content wastes shall not be discharged with Group 1 or 2 wastes except with the written approval of the Executive Officer.
7. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
8. No Group 1 wastes (liquid or solid) shall be disposed at the existing Class I site located between the Martinez Gun Club and the Industrial Tank Class I disposal site.

B. Leachate and Drainage Specifications

1. Leachate from Group 2 and Group 1 wastes or ponded water containing leachate shall not be discharged to waters of the State. Water used during disposal site operations shall be limited to a minimal amount reasonably necessary for purposes of dust control and fire suppression.
2. The site shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods have a predicted frequency of once in 100 years.
3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through Group 1 and 2 wastes deposited on the site.
4. Vertical and lateral hydraulic continuity with groundwaters shall be prevented by the presence of a natural clay barrier of at least 5 feet in thickness and a permeability of 1×10^{-6} cm/sec or less on the bottom and sides of disposal areas. If such a natural condition does not exist, an artificial barrier shall be constructed to meet the above specifications.
5. The exterior surfaces of the disposal area shall be graded to promote lateral runoff of precipitation and to prevent ponding.
6. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

C. Provision

1. The discharger shall comply with all sections of this Order except B.2 and B.4 immediately upon its adoption.

2. The discharger shall submit a report no later than June 1, 1976 describing status of compliance with Sections B.2 and B.4 of this Order. If compliance is not currently being achieved, plans shall be submitted for achieving compliance. In any case, Section B.2 and B.4 shall be complied with no later than October 1, 1977. All reports and plans described above shall be prepared by a registered civil engineer or certified engineering geologist.
3. of north parcel or as shown in
Attachment C the
 been

Not less than 60 days prior to commencing initial disposal operations the discharger shall submit to this Board's Executive Officer for approval, plans and specifications describing the site preparation, construction and filling procedures and sequence. Suffucient exploratory evidence, from borings or approved geophysical techniques, shall be submitted concurrently to demonstrate compliance with all sections of this Order.
4. No later than June 1, 1976 the discharger shall submit to the Regional Board the following information:

 - a. Corrective action undertaken to eliminate runoff from the truck washing area during wet weather.
 - b. A technical report on proposed corrective measures undertaken including time schedule to eliminate seepages at the toe of north parcel landfill slope that parallels the Industrial Tank waste pond.
 - c. A site operation manual, to include site management, construction and maintenance of haul roads and perimeter ditches, methods for depositions, compaction and covering of wastes, site maintenance, and other operation procedures. The manual shall include a clear commitment by the operator to adhere to its provisions.
5. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
6. Prior to use of the existing Class I site, the discharger shall submit sufficient documentation that the site meets all the specifications for Class I landfill as established in Subchapter 15, Chapter 3, Title 23 of the California Administrative Code relative to waste disposal to land.
7. Within 30 days after the completion of filling of any portions of the disposal areas, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded to properly drain all rainwater and to prevent ponding.

Not less than 60 days prior to commencing initial disposal operations the discharger shall submit to this Board's Executive Officer for approval, plans and specifications describing the site preparation, construction and filling procedures and sequence. Sufficient exploratory evidence, from borings or approved geophysical techniques, shall be submitted concurrently to demonstrate compliance with all sections of this Order.

4. No later than June 1, 1976 the discharger shall submit to the Regional Board the following information:
 - a. Corrective action undertaken to eliminate runoff from the truck washing area during wet weather.
 - b. A technical report on proposed corrective measures undertaken including time schedule to eliminate seepages at the toe of north parcel landfill slope that parallels the Industrial Tank waste pond.
 - c. A site operation manual, to include site management, construction and maintenance of haul roads and perimeter ditches, methods for depositions, compaction and covering of wastes, site maintenance, and other operation procedures. The manual shall include a clear commitment by the operator to adhere to its provisions.
5. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
6. Prior to use of the existing Class I site, the discharger shall submit sufficient documentation that the site meets all the specifications for Class I landfill as established in Subchapter 15, Chapter 3, Title 23 of the California Administrative Code relative to waste disposal to land.
7. Within 30 days after the completion of filling of any portions of the disposal areas, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded to properly drain all rainwater and to prevent ponding.

8. The discharger shall file with the Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal area(s).
9. Ninety (90) days prior to discontinuing use of this site for waste disposal, the discharger shall submit a technical report to the Board describing the methods and controls used to assure protection of the quality of surface and groundwaters of the area during final operations and during any subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist. The method used to close the site and maintain protection of the quality of the surface and groundwaters shall comply with waste discharge requirements established by the Regional Board.
10. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
11. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program which may be directed by the Executive Officer.
12. The Board's Order No. 71-61 for the existing Class I retention ponds is rescinded.
13. The discharger shall permit the Regional Board:
 - (a) Entry upon premises on which waste are located or in which any required records are kept,
 - (b) Access to copy any records required to be kept under terms and conditions of this Order,
 - (c) Inspection of monitoring equipment or records, and
 - (d) Sampling of any discharge.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 20, 1976.


FRED H. DIERKER
Executive Officer

Enclosure:
Attachments A, B and C

Attachment A - Order No. 76- 37

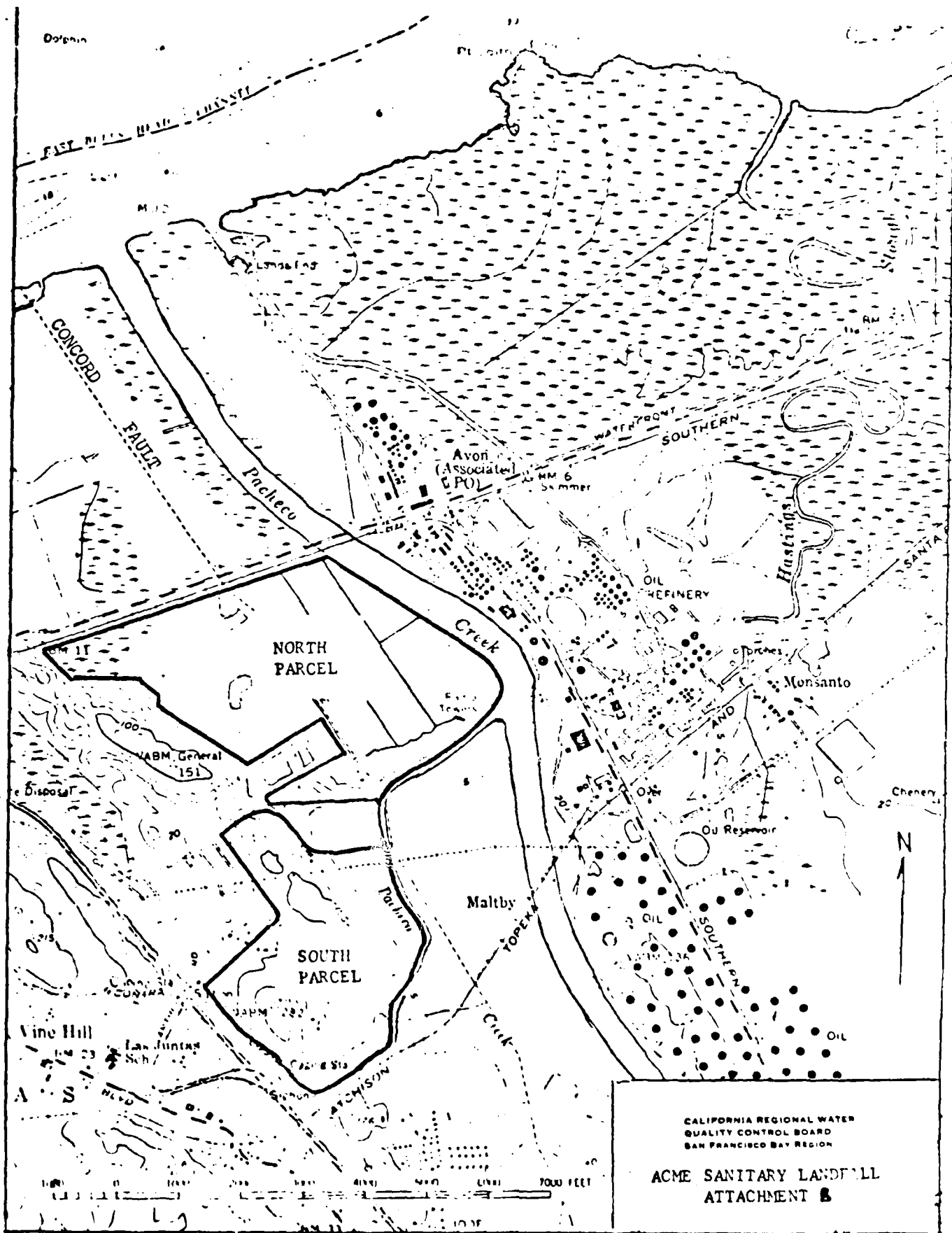
Group I Wastes Authorized for Disposal at
Acme Sanitary Landfill

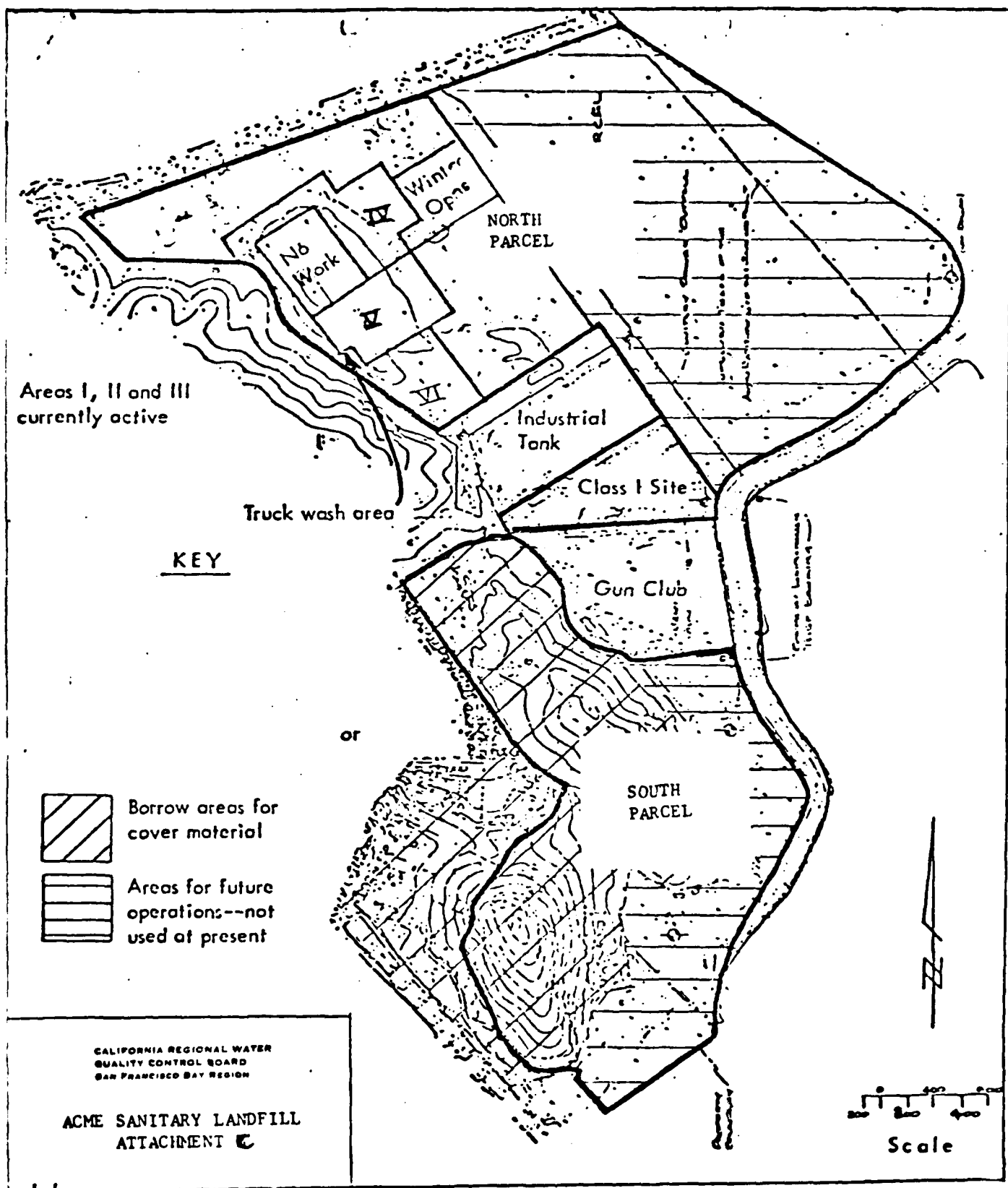
REFRIGERANT WASTE

- A. Cat Cracker Fines -
Mixture of approximately 44% Alumina, 55% silica and 1% Iron oxide with traces of nickel, vanadium, Copper and carbon.
- B. Boiler Blowdown - Water treatment
Approximately 50:50 mixture of calcium and magnesium salts including carbonates, sulfates and hydroxides.
- C. Centrifuge waste -
Oily silt.
- D. Bleacher House Oily Clays -
Approximately equal amounts of oil, lime and calcium carbonate and diatomaceous earth plus some water

CHEMICAL WASTE

- A. RM-17 Sludge - Aluminum hydroxide and water
- B. ASD Filter cake--
Contains mixture of sodium and calcium salts (twice as much sodium salt) including lime, sodium carbonate, sodium chloride, calcium carbonate and calcium chloride, plus filter aid (Approximately 90% diatomaceous earth - 10% cellulose) plus some product (high molecular weight organic material).
- C. Perma-16 Filter cake -
Approximately equal weights of diatomaceous earth and lime (or Calcium Carbonate) plus some high molecular weight organic material and some solvent.





CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

Acme Sanitary Landfill
Martinez, Contra Costa County

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. Grab sample means a sample collected at any time.

2. Standard Observations

a. Receiving Water

- (1) Discoloration and turbidity: description of color, source, and size of affected area.
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Evidence of beneficial water use: presence of water-associated wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
- (4) Hydrographic condition:
 - (a) Water and sampling depths.
- (5) Weather condition:
 - (a) Wind - direction and estimated velocity.
 - (b) Precipitation - total precipitation during the previous five days and on the day of observation.

b. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

- (1) Determine height of the freeboard at lowest point of dikes confining liquid wastes.
- (2) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)
- (3) Odor: presence or absence, characterization, source, and distance of travel.
- (4) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

c. Periphery of Disposal Facilities

- (1) Odor: presence or absence, characterization, source, and distance of travel.
- (2) Weather condition: wind - direction and estimated velocity.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B with the following conditions:

1. Observations

- a. Land disposal sites shall be inspected for evidence of leaching or surfacing waste, and all other applicable Standard Observations.

E. RECORDS TO BE MAINTAINED

1. Written records shall be maintained at the landfill site or office and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:
- a. Identity of sampling and observation stations by number.
- b. Date and time of sampling and/or observations.
- c. Date and time that analyses are started and completed, and name of personnel performing the analyses.
- d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.
- e. Calculations of results.
- f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed for each calendar month (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-g. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

- (1) In the case of corporations, by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,
- (2) In the case of a partnership, by a general partner, or
- (3) In the case of a sole proprietorship, by the proprietor,
- (4) In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be specified by the Regional Board.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. Data Summary

Summary tabulations of the data to include for each constituent the total number of analyses, maximum, minimum, and average values for each month. The report format will be specified by the Regional Board.

f. List of Approved Analyses

- (1) Listing of analyses for which the discharger is approved by the State Department of Health.
- (2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

g. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphical summaries of the monitoring data obtained during the previous year.
2. Comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
3. A map showing the area in which filling has been completed during prior calendar year.

PART B

I. DESCRIPTION OF SAMPLING STATIONS & SCHEDULE OF SAMPLING, ANALYSIS & OBSERVATIONS FOR NORTH PARCEL

A. WASTE MONITORING

1. Monthly, record and report the total volume and weight, separately, of Group 2 and Group 3 waste (in cubic yards and tons) deposited on the site during the month, and the daily average.

(The monthly records shall be maintained at the landfill office. Weight of the Group 2 and 3 wastes shall be estimated and reported Quarterly.)

2. Monthly, record the volume of fill completed, in cubic yards, showing the location(s) and dimensions on a sketch or a map.
3. Daily record the weight, volume and type of each Group 1 waste received at the site and location of disposal. Summarize and report monthly.
4. Weekly, record the volume of cover material placed on active or inactive areas including type of material used, the location and depth of cover material placed. Report monthly.

B. ON-SITE OBSERVATIONS

<u>Station</u>	<u>Description</u>	
S-1 thru S-'n'	Observation stations located on any past or presently active portion of the waste site at grid squares delineated by a 1000 foot grid network.	
P-1 thru P-'n'	These stations shall be located at equidistant intervals not exceeding 1000 feet around the perimeter of the disposal site.	
<u>Station</u>	<u>Frequency of Observation</u>	<u>Observations</u>
All S Stations in active disposal areas	Weekly throughout the year	1. Evidence of ponded water at any point on the disposal site.
All other "S" stations in inactive areas	Weekly observation during November 1st thru March 31st and monthly the rest of the year.	2. Evidence of refuse not confined within a cell or parcel. 3. Evidence of "day-lighted" refuse.

Observation

4. Evidence of waste in contact with pools of surface water.
5. Evidence of waste material not confined within appropriate disposal areas as classified.

Station

All P
Stations

Frequency of Observations

Weekly during November 1
thru March 31. Monthly
rest of the year.

Observations

1. Evidence of refuse not confined within a cell or parcel.
2. Evidence of odors presence or absence, the characteristics, intensity, source distance of travel.
3. Evidence of leachate or water entering or leaving the disposal site, and estimated size of affected area.
4. Weather conditions, wind direction and estimated velocity, precipitation during the previous 5 days and on the day of observation.

All "P" and "S" stations must be monitored at the above described frequency and the observations reported monthly.

C. GROUNDWATER MONITORING

<u>Station</u>	<u>Description</u>
G-1	A well located within 50 feet of the northwesterly corner of the area II and III as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-2	A well located 1000 feet easterly of well G-1 as shown on Attachment "D". The depth shall be to the first available ground water.*
G-3	A well located 50 feet westerly of the sewer outfall as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-4	A well located between well No. G-18 of Industrial tank and well G-3 as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-5	A well located within 50 feet of the southeasterly corner of area I. (Same as Industrial tank well No. G-18).
G-6	A well located at southwesterly corner of the site (same as Industrial tank well No. G-23).

*Penetrate and fully perforate the uppermost permeable coarse grain layer such as sand and/or gravel.

GR-1 thru	Risers located in the filled and partially filled portions of the refuse site at a 1000 foot grid system. The risers depth shall be the bottom of the disposal site.
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A well drilling log shall be submitted for each sampling well established per this monitoring program.

Each such well shall be constructed in accordance with the well construction standards of the Contra Costa County Health Department, Environmental Control.

The well log and a report of inspection or certification by the Contra Costa County Health Department, documenting conformance with the said standards, shall be filed within 30 days after each well has been completed.

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All "GR" Stations	Observe <u>Quarterly</u> throughout the year.	Leachate level	feet
All "G" Stations	Grab sample quarterly throughout the year	water level	feet
		calcium	mg/l
		chloride	mg/l
		COD	mg/l
		pH	unit
		Iron	mg/l
		Magnesium	mg/l
		Nitrate Nitrogen (as N)	mg/l
		Potassium	mg/l
		Sodium	mg/l
		Sulfate	mg/l
		Calcium Hardness (as CaCO_3)	mg/l
		Magnesium Hardness (as CaCO_3)	mg/l
		Total phosphate	mg/l
		Total Kjeldahl nitrogen (as N)	mg/l
		TDS	mg/l
		Total chromium	mg/l
		Cadmium	mg/l

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>
All "G"	Grab sample yearly	Pesticide: using gas chromatograph techniques, the discharger shall report those chlorinated hydrocarbon compounds in which the concentration exceeds 0.05 ppm.
		Utilizing the current data, the discharger shall submit an evaluation of the effects of the disposal site on the groundwater on annual basis.

All "GR" and "G" stations shall be reviewed after 1 year of analyses.

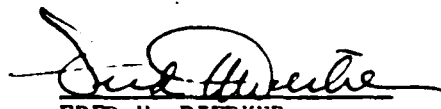
Prior to taking any grab samples of the groundwater wells, the wells water must be pumped a minimum of 5-10 minutes.

F. MISCELLANEOUS REPORTING

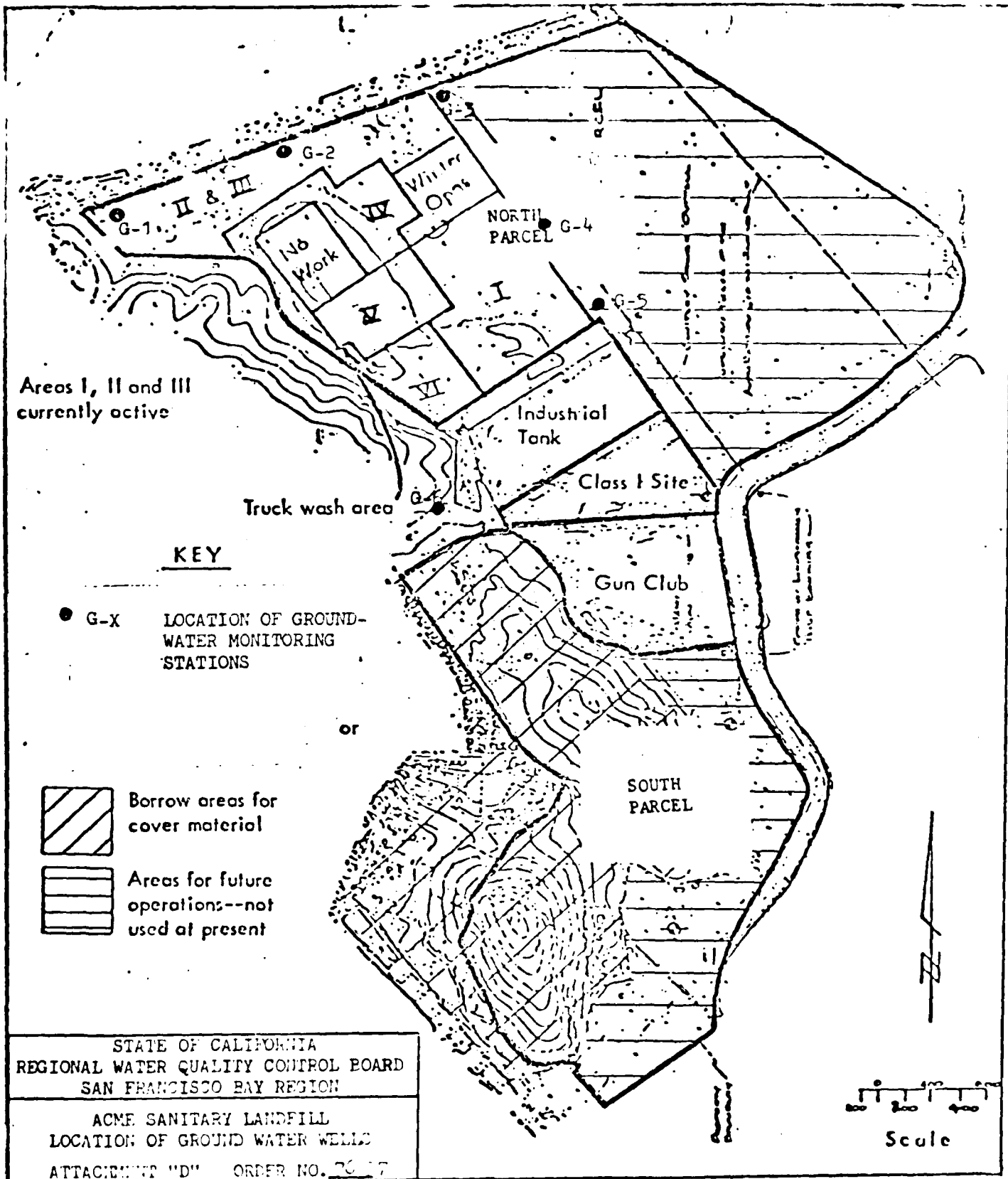
1. Prior to the placement of Group 1 and 2 waste materials in areas II, III, VII and VIII of the disposal area the discharger shall submit documentation of the presence of an underline clay layer of at least five feet in thickness and a permeability of 10^{-6} cm/sec or less on the bottom and sides of each disposal area. If such a natural condition does not exist, the discharger shall submit documentation that an artificial liner meeting the above specifications has been constructed.
2. Within 30 days after the completion of filling of any portion of the disposal, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded to properly drain all rainwater and to prevent ponding.
3. By October 31, 1976 file documentation of all actions taken to control the migration of methane gas from Group 1 and 2 wastes necessary to prevent creation of a nuisance.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board Order No. 76-37.
2. Has been ordered in writing by the Executive Officer on April 20, 1976 and becomes effective immediately.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.


FRED H. DIERKER
Executive Officer

Attachment:
Map "D"
Appendix E



APPENDIX E

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

Federal regulations were published (Table I, 40 CFR136, October 16, 1973) governing the methods that are to be used in analyzing wastes for pollutants. Dischargers are required to use Standard Methods for all parameters for which EPA and State Department of Health approves Standard Methods. Table II lists those constituents for which a test in Standard Methods was not deemed acceptable and lists the method and reference that is considered acceptable.

If a discharger wishes to use an alternate method to Standard Methods which is approved by EPA, this request may be approved by the Executive Officer.

Under certain circumstances other methods will be approved by EPA on a case-by-case basis and upon request by the discharger.

Such a request may be made by letter until printed application forms are made available. The letter or application should contain the following information:

1. The name and address of the responsible person or firm making the discharge (if not the applicant), the permit number, the issuing agency, and the discharge serial number;
2. Identify the pollutant or parameter for which approval of an alternate testing procedure is being requested;
3. Justification for using testing procedures other than those specified;
4. A detailed description of the proposed alternate test procedure, together with references to published studies of the applicability of the alternate test procedure to the effluents in question.

The regional board executive officer should forward the application letter to the State Board. The application will then be transmitted to the Department of Health with a request for comments and recommendations.

The State Board will consider the comments and recommendations received from the regional board, the Department of Health, and other agencies if appropriate, to formulate its recommendations to the Regional Administrator.

Within 30 days of receipt of an application, the State Board will forward such application, together with its recommendations, to the Regional Administrator, EPA. Within 90 days of receipt by the Regional Administrator of an application for an alternate test procedure, the Regional Administrator shall notify the applicant and regional board of approval or rejection, or shall specify the additional information which would be required to determine whether to approve the proposed test procedure.

TABLE 1. List of APPROVED TEST PROCEDURES

Method	Reference		
	Standard	ASTM	RPA
1. Atomic absorption method for cadmium, lead, and zinc	P 330	P 113	P 8
2. Atomic absorption method for copper, iron, and manganese	P 490	P 113	P 8
3. Atomic absorption method for nickel	P 490	P 113	P 8
4. Atomic absorption method for cobalt	P 490	P 113	P 8
5. Atomic absorption method for chromium	P 490	P 113	P 8
6. Atomic absorption method for vanadium	P 490	P 113	P 8
7. Atomic absorption method for molybdenum	P 490	P 113	P 8
8. Atomic absorption method for selenium	P 490	P 113	P 8
9. Atomic absorption method for tellurium	P 490	P 113	P 8
10. Atomic absorption method for bismuth	P 490	P 113	P 8
11. Atomic absorption method for antimony	P 490	P 113	P 8
12. Atomic absorption method for arsenic	P 490	P 113	P 8
13. Atomic absorption method for strontium	P 490	P 113	P 8
14. Atomic absorption method for barium	P 490	P 113	P 8
15. Atomic absorption method for calcium	P 490	P 113	P 8
16. Atomic absorption method for magnesium	P 490	P 113	P 8
17. Atomic absorption method for sodium	P 490	P 113	P 8
18. Atomic absorption method for potassium	P 490	P 113	P 8
19. Atomic absorption method for lithium	P 490	P 113	P 8
20. Atomic absorption method for rubidium	P 490	P 113	P 8
21. Atomic absorption method for cesium	P 490	P 113	P 8
22. Atomic absorption method for francium	P 490	P 113	P 8
23. Atomic absorption method for actinium	P 490	P 113	P 8
24. Atomic absorption method for thorium	P 490	P 113	P 8
25. Atomic absorption method for protactinium	P 490	P 113	P 8
26. Atomic absorption method for uranium	P 490	P 113	P 8
27. Atomic absorption method for neptunium	P 490	P 113	P 8
28. Atomic absorption method for plutonium	P 490	P 113	P 8
29. Atomic absorption method for americium	P 490	P 113	P 8
30. Atomic absorption method for curium	P 490	P 113	P 8
31. Atomic absorption method for berkelium	P 490	P 113	P 8
32. Atomic absorption method for californium	P 490	P 113	P 8
33. Atomic absorption method for einsteinium	P 490	P 113	P 8
34. Atomic absorption method for fermium	P 490	P 113	P 8
35. Atomic absorption method for mendelevium	P 490	P 113	P 8
36. Atomic absorption method for nobelium	P 490	P 113	P 8
37. Atomic absorption method for lawrencium	P 490	P 113	P 8
38. Atomic absorption method for rutherfordium	P 490	P 113	P 8
39. Atomic absorption method for dubnium	P 490	P 113	P 8
40. Atomic absorption method for seaborgium	P 490	P 113	P 8
41. Atomic absorption method for bohrium	P 490	P 113	P 8
42. Atomic absorption method for hassium	P 490	P 113	P 8
43. Atomic absorption method for meitnerium	P 490	P 113	P 8
44. Atomic absorption method for darmstadtium	P 490	P 113	P 8
45. Atomic absorption method for roentgenium	P 490	P 113	P 8
46. Atomic absorption method for copernicium	P 490	P 113	P 8
47. Atomic absorption method for nihonium	P 490	P 113	P 8
48. Atomic absorption method for flerovium	P 490	P 113	P 8
49. Atomic absorption method for livermorium	P 490	P 113	P 8
50. Atomic absorption method for tennessine	P 490	P 113	P 8
51. Atomic absorption method for oganesson	P 490	P 113	P 8
52. Atomic absorption method for ununennium	P 490	P 113	P 8
53. Atomic absorption method for unbinilium	P 490	P 113	P 8
54. Atomic absorption method for untrium	P 490	P 113	P 8
55. Atomic absorption method for unquadrum	P 490	P 113	P 8
56. Atomic absorption method for unquintum	P 490	P 113	P 8
57. Atomic absorption method for unsexium	P 490	P 113	P 8
58. Atomic absorption method for unseptium	P 490	P 113	P 8
59. Atomic absorption method for unoctium	P 490	P 113	P 8
60. Atomic absorption method for unnonium	P 490	P 113	P 8
61. Atomic absorption method for undecium	P 490	P 113	P 8
62. Atomic absorption method for undecium	P 490	P 113	P 8
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76. Atomic absorption method for undecium	P 490	P 113	P 8
77. Atomic absorption method for undecium	P 490	P 113	P 8
78. Atomic absorption method for undecium	P 490	P 113	P 8
79. Atomic absorption method for undecium	P 490	P 113	P 8
80. Atomic absorption method for undecium	P 490	P 113	P 8
81. Atomic absorption method for undecium	P 490	P 113	P 8
82. Atomic absorption method for undecium	P 490	P 113	P 8
83. Atomic absorption method for undecium	P 490	P 113	P 8
84. Atomic absorption method for undecium	P 490	P 113	P 8
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86. Atomic absorption method for undecium	P 490	P 113	P 8
87. Atomic absorption method for undecium	P 490	P 113	P 8
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91. Atomic absorption method for undecium	P 490	P 113	P 8
92. Atomic absorption method for undecium	P 490	P 113	P 8
93. Atomic absorption method for undecium	P 490	P 113	P 8
94. Atomic absorption method for undecium	P 490	P 113	P 8
95. Atomic absorption method for undecium	P 490	P 113	P 8
96. Atomic absorption method for undecium	P 490	P 113	P 8
97. Atomic absorption method for undecium	P 490	P 113	P 8
98. Atomic absorption method for undecium	P 490	P 113	P 8
99. Atomic absorption method for undecium	P 490	P 113	P 8
100. Atomic absorption method for undecium	P 490	P 113	P 8

See Note at end of Table 1

TABLE I (continued)

Parameter and units	Method	Page	
		657-664	665-672
a. Total streptococci bacteria number/100	MPN; membrane filter; plate count	p. 689 p. 690 p. 691	
b. Coliform bacteria bacteria number 100	MPN; Membrane filter	p. 669 p. 664	
c. Coliform bacteria (total) number 100	do.	p. 664 p. 679	
Radioactive parameters:			
d. Alpha—total pCi/liter	Proportional counter; scintillation counter	p. 598	p. 509
e. Alpha—counting error pCi/liter	do.	p. 598	p. 512
f. Beta—total pCi/liter	Proportional counter	p. 598	p. 478
g. Beta—counting error pCi/liter	do.	p. 598	p. 478
h. Gamma—total pCi/ liter	Proportional counter; scintillation counter	p. 611 p. 617	p. 674

* A number of such systems manufactured by various companies are considered to be comparable in their performance. In addition, another technique, based on Combustion-Methane Detection, is also acceptable.

† For the determination of total metals the sample is not filtered before processing. Choose a volume of sample appropriate for the expected level of metals. If much suspended material is present, as little as 50-100 ml of well-mixed sample will most probably be sufficient. (The sample volume required may also vary proportionally with the number of metals to be determined.)

‡ Transfer a representative aliquot of the well-mixed sample to a Griffin beaker and add 3 ml of concentrated distilled HNO₃. Place the beaker on a hotplate and evaporate to dryness making certain that the sample does not boil. Cool the beaker and add another 3 ml portion of distilled concentrated HNO₃. Cover the beaker with a watch glass and return to the hotplate. Increase the temperature of the hotplate so that a gentle reflux action occurs. Continue heating, adding additional acid as necessary until the digestion is complete, generally indicated by a light colored residue. Add 1 ml (with distilled water) distilled concentrated HCl in an amount sufficient to dissolve the residue upon warming. Wash down the beaker walls and the watch glass with distilled water and filter the sample to remove silicates and other insoluble material that could clog the atomizer. Adjust the volume to some predetermined value based on the expected metal concentrations. The sample is now ready for analysis. Concentrations so determined shall be reported as "total".

§ See D. C. Manning, "Technical Notes", Atomic Absorption Newsletter, Vol. 10, No. 6 p. 123, 1971. Available from Perkin-Elmer Corporation, Main Avenue, Norwalk, Connecticut 06852.

¶ Atomic absorption method available from Methods Development and Quality Assurance Research Laboratory, National Environmental Research Center, USEPA, Cincinnati, Ohio 45268.

‡ For up-to-date method, see: Journal of the American Water Works Association 64, No. 1, pp. 20-25 (Jan. 1972) or ASTM Method D 3223-73, American Society for Testing and Materials Headquarters, 1906 Race St., Philadelphia, PA 19103.

§ Laboratory procedures for aldehydes, chlorinated organic compounds, and pesticides can be obtained from the Methods Development and Quality Assurance Research Laboratory, National Environmental Research Center, USEPA, Cincinnati, Ohio 45268.

¶ Benzidine may be estimated by the method of M.A. El-Dib, "Colorimetric Determination of Aromatic Derivatives in Natural Waters", El-Dib, M.A., Journal of the Association of Official Analytical Chemists, Vol. 54, No. 6, Nov. 1971, pp. 1343-1357.

* As a prescreening measurement.

NOTE: This copy of Table I was substituted for the original, which is illegible.

FROM: Federal Register, Vol. 38, No. 199--Tuesday, October 16, 1973

TABLE II

METHODS TO USE IN PREFERENCE TO
"STANDARD METHODS"

<u>Constituent</u>	<u>Units</u>	<u>Method</u>	<u>Reference</u>
Total dissolved solids (filterable)	mg/l	Glass fiber filtration- 180° C	EPA Methods <u>1/</u> p. 275
Ammonia	mg N/l	Distillation-nesslerization or titration automated phenolate	EPA Methods - p. 134
Acidity	mg CaCO ₃ /l	Electrometric endpoint or phenolphthalein end point	ASTM <u>2/</u> - p. 148
Nitrite	mg N/l	Manual or automated color- imetric diazotization	EPA Methods - p. 185 p. 195
Antimony - total <u>6/</u>	mg/l	Atomic absorption	<u>3/</u>
Cobalt - Total	mg/l	" "	ASTM - p. 692
Molybdenum - total	mg/l	" "	<u>3/</u>
Selenium - total	mg/l	" "	<u>3/</u>
Thallium - Total	mg/l	" "	<u>3/</u>
Tin	mg/l	" "	<u>3/</u>
Titanium	mg/l	" "	<u>3/</u>

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

REVISED SELF-MONITORING PROGRAM

FOR

ACIE SANITARY LANDFILL
MARTINEZ, CONTRA COSTA COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. Grab sample means a sample collected at any time.

2. Standard Observations

a. Receiving Water

- (1) Discoloration and turbidity: description of color, source, and size of affected area.
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Evidence of beneficial water use: presence of water-associated wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
- (4) Hydrographic condition:
 - (a) Water and sampling depths.
 - (b) Tidal conditions.
- (5) Weather condition:
 - (a) Wind - direction and estimated velocity.
 - (b) Precipitation - total precipitation during the previous five days and on the day of observation.

b. Disposal Area and Periphery of Disposal Facilities

This applies to solid wastes confined or unconfined including high moisture content group 2 wastes.

- (1) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.
- (4) Cover material: Depth of inert material over the inactive areas.
- (5) Evidence of erosion and/or day-lighted refuse.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B.

E. RECORDS TO BE MAINTAINED

1. Written records shall be maintained at the landfill site or office and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:
 - a. Identity of sampling and observation stations by number.
 - b. Date and time of sampling and/or observations.
 - c. Date and time that analyses are started and completed, and name of personnel performing the analyses.
 - d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.
 - e. Calculations of results.
 - f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed for each calendar month (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-f. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

- (1) In the case of corporations, by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,
- (2) In the case of a partnership, by a general partner, or
- (3) In the case of a sole proprietorship, by the proprietor,

- (4) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be specified by the Regional Board.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing pipeline and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. List of Approved Analyses

- (1) Listing of analyses for which the discharger is approved by the State Department of Health.
- (2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

f. Annual Reporting

By March 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphical summaries of the monitoring data obtained during the previous year.
2. Comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
3. A map showing the area in which filling has been completed during prior calendar year.
4. Summary of the groundwater analyses indicating any change in the quality of the groundwater.

1. DESCRIPTION OF SAMPLING STATIONS & SCHEDULE OF SAMPLING, ANALYSES & OBSERVATIONS

A. WASTE MONITORING

1. Group 1 Waste

Daily record of the weight, volume and type of each Group 1 waste received at the site and location of disposal. Summarize and report quarterly.

2. Group 2 & 3 Wastes

Monthly, record the total volume and weight of a refuse (in cubic yards and tons) deposited on the site during the month, and the daily average. Report quarterly.

3. Monthly, record the volume of fill completed, in cubic yards, showing the location(s) and dimensions on a sketch or a map. Report quarterly.

The monthly records shall be maintained at the landfill office. The weight of the refuse shall be estimated.

B. ON SITE OBSERVATION

Station

Description

S-1
thru
S-'n'

Observation stations located on any past or presently active portion of the waste site at grid squares delineated by a 1000 foot grid network.

P-1 thru
P-'n'

These stations shall be located at equidistant intervals not exceeding 1000 feet around the perimeter of the disposal site.

Station

Frequency of Observation

Observations

All S
Stations

Weekly throughout the year

1. Evidence of ponded water at any point on the disposal site.
2. Evidence of refuse not confined within disposal site or cell.
3. Evidence of erosion and/or day-lighted refuse.
4. Evidence of waste in contact with pools of surface water.

<u>Station</u>	<u>Frequency of Observation</u>	<u>Observations</u>
All P Stations	Weekly throughout the year	<ol style="list-style-type: none"> 1. Evidence of refuse not confined within a cell or parcel. 2. Evidence of odors presence or absence, characteristics, intensity source and distance of travel. 3. Evidence of leachate or water entering or leaving the disposal site, and estimated size of affected area.

All "P" and "S" stations must be monitored according to the above described frequency and report quarterly.

C. SEEPAGE AND/OR LEACHATE MONITORING

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	At a point at which each discharge occurs from the disposal area. Include a map indicating locations of discharge(s).

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All L Stations	Daily, grab sample at each occurrence	COD	mg/l
		D.O.	mg/l
		Dissolved sulfide	mg/l
		Odors	description
		Color	description
		pH	electrometric units
		Conductivity	micromhos/cm

A report shall be made by telephone of any seepage or leachate leaving the disposal area immediately after occurrence. A written report shall be filed with this Board within five days and shall contain the following information: (1) Map showing location(s) of discharge or leachate (2) Approximate flow rate (3) Nature of effect (i.e. discoloration of receiving water, size of affected area, and (4) Corrective measures undertaken.

D. RECEIVING WATER

<u>Station</u>	<u>Description</u>
CU-1 thru CU-'n'	Located in the receiving water, 200 feet upstream from point of discharge.
CD-1 thru CD-'n'	Located in the receiving water, 200 feet downstream from point of discharge.

<u>Station</u>	<u>Types of Sample and Frequency</u>	<u>Analyses</u>	<u>Unit</u>
All C Stations	Daily, during discharge, coincident with sampling at "L" stations	D. O ₂	mg/l
		Total Sulfide	mg/l
		Dissolved Sulfide	mg/l
		pH	electrometric units
		Conductivity	micromhos/cm
		Odors	description
		Color	description

E. GROUNDWATER AND PLETHOMETRIC GRADIENT MONITORING

<u>Station</u>	<u>Description</u>
G-1	A well located within 50 feet of the northwesterly corner of the area II and III as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-2	A well located 1000 feet easterly of well G-1 as shown on Attachment "D". The depth shall be to the first available ground water.*
G-3	A well located 50 feet westerly of the sewer outfall as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-4	A well located between well No. G-18 of Industrial tank and well G-3 as shown on Attachment "D". The depth shall be to the first available groundwater.*
G-5	A well located within 50 feet of the southeasterly corner of area I. (Same as Industrial tank well No. G-18).
G-6	A well located at southwesterly corner of the site (same as Industrial tank well No. G-23).

*Penetrate and fully perforate the uppermost permeable coarse grain layer such as sand and/or gravel.

<u>Station.</u>	<u>Description</u>
G-7	Well located mid-way along, and outside of, the north barrier of the South Parcel.
G-8	Well located along northern half, and outside of, the east barrier of the South Parcel.
G-9	Well located along southern half, and outside of, the east barrier of the South Parcel.
G-10	Well located mid-way, along, and outside of, the south east barrier of the South Parcel.
G-11	Well located in the southwestern portion of the South Parcel.
G-12	Well Located in the north western portion of the South Parcel.

Wells G-7, G-8, G-9, and G-10 shall be installed to a depth of 10 feet below the water table. Wells G-11 and G-12 shall penetrate five (5) feet into bedrock between the upland and lowland areas.

StationDescription

GR-1 Risers located in the filled and partially filled
thru portions of the refuse site at a 1000 foot grid
GR-n system. The risers depth shall be the bottom of
the disposal site.

A well drilling log shall be submitted for each sampling well established per this monitoring program.

Each such well shall be constructed in accordance with the well construction standards of the Contra Costa County Health Department, Environmental Control.

The well log and a report of inspection or certification by the Contra Costa County Health Department, documenting conformance with the said standards, shall be filed within 30 days after each well has been completed.

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All "GR" Stations	Observed <u>quarterly</u> Throughout the year.	Leachate level	feet
All "G" Stations	Grab sample quarterly throughout the year	water level	feet
		Color	visual
		Chloride	mg/l
		CO ₂	mg/l
		TDS	mg/l
		Nitrate	
		Nitrogen	mg/l
		Total	
		Kjeldahl	mg/l
		Nitrogen (as N)	
		Conductivity	microhm/cm
		pH	electrometric

All "GR" and "G" stations shall be reviewed after one year of analyses.

Prior to taking any grab samples of the groundwater wells, the wells water must be pumped a minimum of two to five minutes.

F. MISCELLANEOUS REPORTING

1. Prior to the placement of Group 1 and 2 waste materials in areas II, III, VII, and VIII of the disposal area the discharger shall submit documentation of the presence of an underline clay layer of at least five feet in thickness and a permeability of 10^{-6} cm/sec or less on the bottom and sides of each disposal area. If such a natural condition does not exist, the discharger shall submit documentation that an artificial liner meeting the above specifications has been constructed.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board Order No. 75-37.
2. Has been ordered in writing by the Executive Officer on April 20, 1976, to become effective immediately and was revised to be implemented on the date ordered as shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

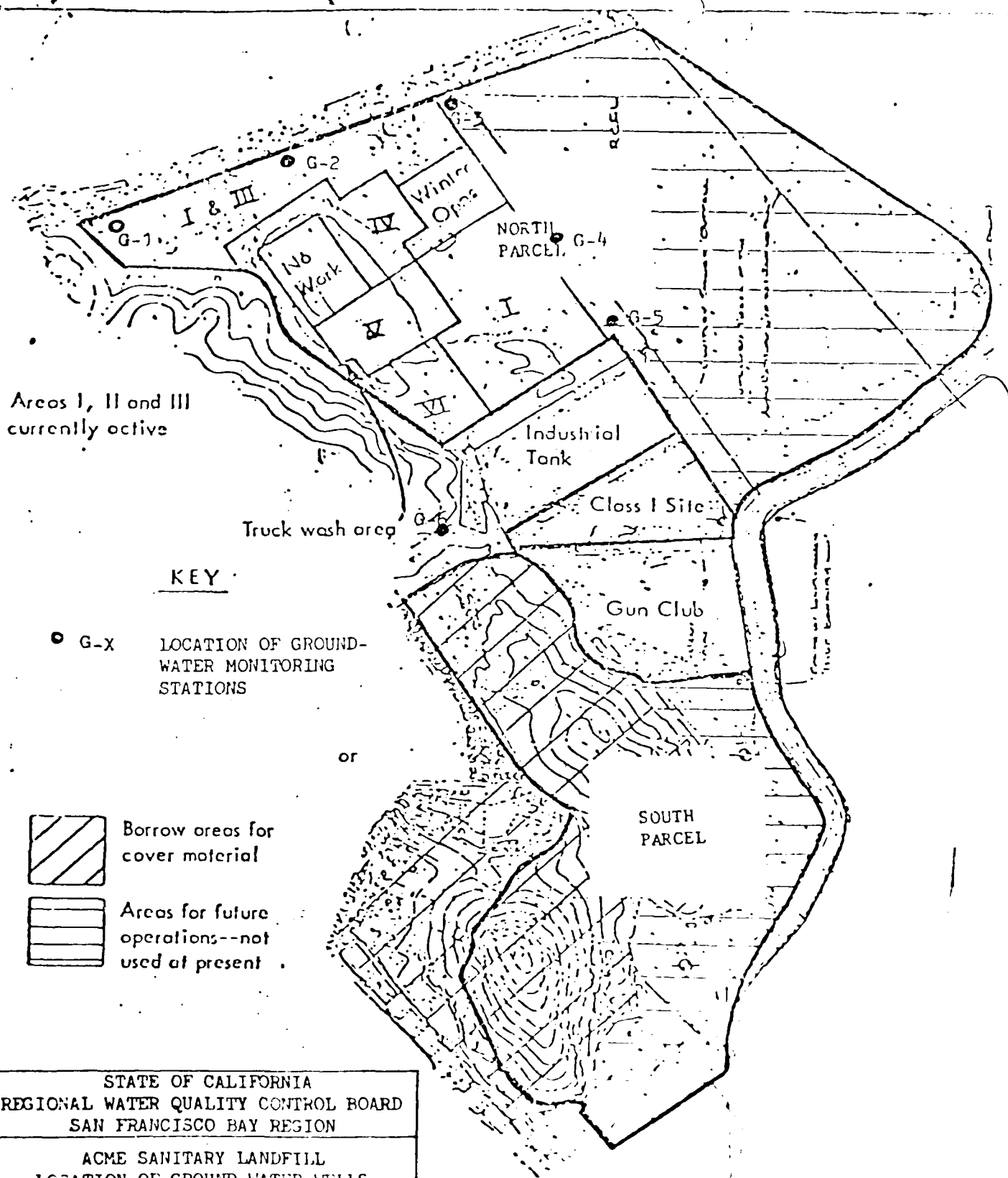

FRED H. DIERKER
Executive Officer

DATE ORDERED March 8, 1976

Attachment:

Attachment D .

DATE REVISED NOVEMBER 6, 1981



STATE OF CALIFORNIA
 REGIONAL WATER QUALITY CONTROL BOARD
 SAN FRANCISCO BAY REGION

ACME SANITARY LANDFILL
 LOCATION OF GROUND WATER WELLS
 ATTACHMENT "D" ORDER NO. 76-7

F/G 13/2

NL

AD 4
1 8367

1036

1 BEFORE THE BOARD OF SUPERVISORS OF THE COUNTY OF CONTRA COSTA,
2 STATE OF CALIFORNIA

3 In the Matter of Granting
4 permit to ACME FILL COR-
5 PORATION to deposit garbage. }

6
7 WHEREAS, a petition for permit to deposit garbage was
8 filed with this Board on the 14th day of November, 1958, by ACME
9 FILL CORPORATION, a corporation, pursuant to the provisions of
10 Ordinance 829 of the County of Contra Costa; and

11 WHEREAS, the Board has considered said petition, and
12 good cause appearing therefor;

13 NOW, THEREFORE, IT IS ORDERED that a permit to deposit
14 garbage under the provisions of applicable ordinances of the County
15 of Contra Costa is hereby GRANTED to ACME FILL CORPORATION for
16 the lands described in Exhibit "A" attached to said petition, to
17 wit:

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All that certain real property situated in the County of Contra Costa, State of California, described as follows:

PARCEL ONE

Portion of the Southeast 1/4 of Section 9, Portion of the South 1/2 of Section 10, Portion of the North 1/2 of Section 15 and a Portion of the Northeast 1/4 of the Northeast 1/4 of Section 16 all in Township 2 North, Range 2 West, Mount Diablo Base and Meridian, containing 228.78 acres, more or less, described as follows:

Beginning on the south line of the right of way of the Southern Pacific Railroad Company, at the most northerly corner of the parcel of land described as Parcel One in the deed from Lindgren & Swinerton, Inc., et al, to Acme Fill Corp., recorded June 24, 1957 in Volume 3003 of Official Records, at page 107; thence from said point of beginning, north 71° 15' 50" east, along said south line, 1957.28 feet to the west bank of Walnut Creek, also called Pacheco Slough, as said west bank exists in October, 1957; thence along said west bank and along the north bank of said Walnut Creek, as follows: South 57° 55' east, 2593.46 feet; south 44° 30' 20" east, 579.96 feet; south 18° 14' east, 400 feet; south 15° 46' west, 264 feet; south 54° 16' west, 275.76 feet; south 51° 16' west, 772.2 feet; south 40° 01' west, 471.9 feet; south 64° 16' west, 1254 feet and south 18° 31' west, 105 feet; thence north 32° 40' 10" west, 77.23 feet to the most easterly corner of the parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., recorded January 25, 1957 in Volume 2921 of Official Records, at page 16; thence north 32° 40' 10" west, along the northeast line of said East Bay Oil Recovery Co. parcel, and along the northeast line of said Acme Fill Corp. parcel (3003 OR 107), 322.82 feet to the point of beginning.

The courses and distances herein referred to are based on California Coordinate System, Zone 3.

PARCEL TWO

Portion of the Southwest 1/4, portion of the Southeast 1/4 of Section 9 and a portion of the Northeast 1/4 of Section 16, Township 2 North, Range 2 West, Mount Diablo Base and Meridian, containing 85.79 acres, more or less, described as follows:

Beginning at an iron pipe at the most easterly corner of the parcel of land described as Parcel One in the deed from Lindgren & Swinerton, Inc. to Acme Fill Corp., recorded July 12, 1954 in Volume 2345 of Official Records, at page 294, said point of beginning being also the most westerly corner of the parcel of land described as Parcel One in the deed from William Gottschalk et al, to East Bay Oil Recovery Co., recorded January 25, 1957 in Volume 2921 of Official Records, at page 16; thence from said point of beginning north 56° 12' 30" east, along

the northwest line of said East Bay Oil Recovery parcel, 1360 feet; thence north 33° 47' 30" west, 2580.17 feet to the south line of the right of way of the Southern Pacific Railway Company; thence south 70° 17' 30" west, along said south line, 1402.14 feet to the most northerly corner of said Acme Fill Corp. parcel (2345 OR 294); thence south 33° 47' 30" east, along the northeast line of said Acme Fill Corp. parcel, 2921.36 feet to the point of beginning.

PARCEL THREE

Portion of Section 15 and 16, Township 2 North, Range 2 West, Mount Diablo Base and Meridian and being portion of Swamp and Overflow Surveys No. 268 and 269 and a portion of the Rancho Las Juntas, Described as follows:

Beginning at a point on the southeasterly line of the 21.00 acre parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., dated January 10, 1957 and recorded January 25, 1957, under Recorder's File No. 5137 at the most westerly corner of the 45 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to Central Contra Costa Sanitary District, dated March 20, 1958 and recorded May 5, 1958 under Recorder's File No. 23050; thence from said point of beginning south 56° 12' 30" west along the southeasterly line of said 21.00 acre parcel 1315.00 feet to the most southerly corner thereof; thence leaving said southeasterly line south 33° 47' 30" east to a point in the center of the 10 feet in width strip of land described in the deed from Wm. Gottschalk, et ux, to California Water Service Company, recorded June 18, 1940 in Volume 549 of Official Records, at page 35; thence north 85° 45' east along said center line and along the center of the 10 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to California Water Service Company recorded June 25, 1940 in Volume 546 of Official Records, at page 412 to a point in the westerly line of the hereinabove mentioned 45 feet in width strip (File No. 23050); thence north 32° 46' 10" west along said westerly line to the point of beginning.

EXCEPTING THEREFROM: a right of way, not to be exclusive, as an appurtenance to the remaining lands of the grantor, for use as a roadway for vehicles of all kinds, pedestrians and animals, for water, gas, oil and sewer pipe lines, and for telephone, electric light and power lines, together with the necessary poles or conduits over that portion of Parcel One above, lying east of a line described as follows:

beginning at the most easterly corner of Parcel One above; thence from said point of beginning south 65° 45' west along the southerly line thereof 100.00 feet to the true point of beginning; thence from said true point of beginning north 4° 15' west to a point on the northeasterly line of Parcel One above.

1 The permit hereby granted shall be revocable by the
2 Board of Supervisors at any time or be subject to suspension if
3 it shall be found by said Board of Supervisors that the substance
4 discharged and deposited by virtue thereof constitutes a public
5 nuisance, or emits disagreeable odors or smells offensive to the
6 public dwelling in the vicinity thereof or passing over and along
7 public highways adjacent thereto.

8 The permit hereby granted is further subject to the
9 following specific conditions, all of which must be strictly ob-
10 served, and to the further requirement that a bond or cash in the
11 amount of \$2,000 approved by the District Attorney shall be filed
12 with the County guaranteeing that the privilege applied for and
13 granted in this permit shall be performed in accordance with the
14 rules and regulations prescribed by this Board in granting said
15 permit and in accordance with applicable State laws:

- 16 1. Dumping operations shall not be carried on
17 on an area-wide basis.
- 18 2. Dumping shall hereafter be carried on on an
19 area one hundred feet (100') square.
- 20 3. Another area one hundred feet (100') square
21 shall be permitted to be open from the pre-
22 vious day's dumping.
- 23 4. Except as hereinbefore provided, the dump
24 site will be covered with two feet (2') of
25 compacted earth.
- 26 5. At the start of each day's operation, the
27 remaining debris from the previous day's
28 operation shall be covered with eight inches
29 (8") of compacted earth.
- 30 6. Burning garbage, oil or other combustible
31 refuse will not be permitted.
- 32 7. When area of operation reaches grade level,
 it will be covered with two feet (2') of
 compacted earth and operations commenced
 on a new area.
8. No garbage on the top or face of the fill
 shall remain uncovered for a period of longer
 than seventy-two (72) hours from the time of
 placement.
9. Rodent infestation will continue to be con-
 trolled and satisfactory means of rodent

1 control will be continued in good faith,
2 to minimize the infestation of rodents.
3 10. Adequate fire protection equipment in
4 good running order shall be provided on
5 the dump site at all times.
6 The foregoing order was passed and adopted by the Board
7 of Supervisors of the County of Contra Costa at a regular meeting
8 by the following vote:
9 AYES: Supervisors IVAN T. GOYAK, MEL F. NIELSEN, RAY
10 S. TAYLOR, W. G. BUCHANAN, JOSEPH
11 S. SILVA.
12 NOES: Supervisors - NONE.
13 ABSENT: Supervisors - NONE.
14 I hereby certify that the foregoing order was duly and
15 regularly introduced, passed and adopted by the Board of Super-
16 visors of the County of Contra Costa at a regular meeting held
17 on the 2nd day of December, 1958.
18 W. T. PAASCH, County Clerk and
19 ex-officio Clerk of the Board
20 of Supervisors of the County
21 of Contra Costa, State of
22 California,
23 By W. T. Paasch
24 Deputy Clerk
25 cc Carlson, Collins, Gordon & Bold
26 Health Officer
27 Public Works Director
28 Sewage, Waste & Water Division of PWD
29 Planning Commission
30
31
32

In the Matter of Granting
permit to operate garbage
dump on certain property
owned by William Gottschalk
and Sarah Gottschalk (Vine
Hill).

On motion of Supervisor Taylor, seconded by Supervisor Frederickson, IT IS BY THE BOARD ORDERED that the Contra Costa Garbagemen's Association (Arthur DeGrazia, Louis A. Rapetto, Louis C. Delchine, Joseph D. Navone and Silvio Garaventa) is granted a permit to use, operate, and control a garbage dump on certain real property owned by William Gottschalk and Sara Gottschalk, which property is located in the Vine Hill area near Martinez, said Contra Costa Garbagemen's Association having filed with this Board a surety bond, No. 471681, in the sum of \$2,000 issued by Glens Falls Indemnity Company of Glens Falls, New York, said bond being filed in accordance with provisions of Ordinance No. 565.

The foregoing order is passed by the unanimous vote of the Board.

And the Board takes recess to meet on Monday, April 16, 1951, at 9 o'clock A.M. in the chambers of the Board of Supervisors, Hall of Records, Martinez, California.


Chairman

ATTEST:

W. T. PAASCH, CLERK

By 
Deputy Clerk

BEFORE THE BOARD OF SUPERVISORS
MONDAY, APRIL 16, 1951
THE BOARD MET IN REGULAR SESSION
AT 9 O'CLOCK A. M.

8 The permit hereby granted is further subject to the
9 following specific conditions, all of which must be strictly ob-
10 served, and to the further requirement that a bond or cash in the
11 amount of \$2,000 approved by the District Attorney shall be filed
12 with the County guaranteeing that the privilege applied for and
13 granted in this permit shall be performed in accordance with the
14 rules and regulations prescribed by this Board in granting said
15 permit and in accordance with applicable State laws:

- 16 1. Dumping operations shall not be carried on
17 on an area-wide basis.
- 18 2. Dumping shall hereafter be carried on on an
19 area one hundred feet (100') square.
- 20 3. Another area one hundred feet (100') square
21 shall be permitted to be open from the pre-
22 vious day's dumping.
- 23 4. Except as hereinbefore provided, the dump
24 site will be covered with two feet (2') of
25 compacted earth.
- 26 5. At the start of each day's operation, the
27 remaining debris from the previous day's
28 operation shall be covered with eight inches
29 (8") of compacted earth.
- 30 6. Burning garbage, oil or other combustible
31 refuse will not be permitted.
- 32 7. When area of operation reaches grade level,
 it will be covered with two feet (2') of
 compacted earth and operations commenced
 on a new area.
8. No garbage on the top or face of the fill
 shall remain uncovered for a period of longer
 than seventy-two (72) hours from the time of
 placement.
9. Rodent infestation will continue to be con-
 trolled and satisfactory means of rodent

control will be continued in good faith,
to minimize the infestation of rodents.

10. Adequate fire protection equipment in
good running order shall be provided on
the dump site at all times.

The foregoing order was passed and adopted by the Board
of Supervisors of the County of Contra Costa at a regular meeting
by the following vote:

AYES: Supervisors IVAN T. GOYAK, MEL F. NIELSEN, RAY
S. TAYLOR, W. G. BUCHANAN, JOSEPH
S. SILVA.

NOES: Supervisors - NONE.

ABSENT: Supervisors - NONE.

I hereby certify that the foregoing order was duly and
regularly introduced, passed and adopted by the Board of Super-
visors of the County of Contra Costa at a regular meeting held
on the 2nd day of December, 1958.

W. T. PAASCH, County Clerk and
ex-officio Clerk of the Board
of Supervisors of the County
of Contra Costa, State of
California,

By R. M. Graziano,
Deputy Clerk

cc Carlson, Collins, Gordon & Bold
Health Officer
Public Works Director
Sewage, Waste & Water Division of PWD
Planning Commission

IN THE BOARD OF SUPERVISORS
OF
CONTRA COSTA COUNTY, STATE OF CALIFORNIA

AUG 5 3 32 PM '81

In the Matter of Hearing on Application)
of Acme Fill Corporation for Land Use)
Permit No. 2052-81, Martinez Area.)

July 7, 1981

The Board on June 23, 1981 having fixed this time for hearing on the application filed by the Acme Fill Corporation for Land Use Permit No. 2052-81 to expand an existing refuse disposal site in the Martinez area; and

A. A. Dehaesus, Director of Planning, having stated that the County Planning Commission had reviewed the aforesaid application at its June 30 meeting and had recommended approval of the land use permit subject to conditions, and having noted that a Negative Declaration of Environmental Significance was filed for the proposal; and

Frank Boerger, representing the applicant, having stated that the 22-acre expansion is needed for land fill operations pending the U.S. Army Corps of Engineers decision on Acme's request for a 200-acre enlargement, having noted that the California Regional Water Quality Control Board has approved the disposal of waste on the site, and having urged that the Board approve the land use permit; and

The following persons having expressed concern with respect to access, buffer zone for existing residences, wildlife and the need for an Environmental Impact Report (EIR):

Lynn M. DeVaney, 830 Bella Vista Avenue, Martinez;
Harry Russo, representing the Martinez Gun Club;
Dorothy Sakazaki, representing residents of the
Vine Hill area;
Albert Castro, 796 Central Avenue, Martinez; and

Jay S. McCoy, Services Division Manager, Central Contra Costa Sanitary District, having stated that the District would not oppose the expansion if an additional condition were included to require a soils engineer to review the fill operations in the area of the existing sanitary sewer pipeline on a monthly basis to guarantee that proper filling operations are being followed; and

Mr. Boerger, in rebuttal, having stated that one of the proposed conditions recommended by the Planning Commission would provide the information requested by the Sanitary District, and having responded to the concerns expressed by the neighbors; and

Supervisor Powers having recommended that a condition be added to prohibit access from Central Avenue to the 22-acre site and that access be permitted along the edge of the Martinez Gun Club property; and

Supervisor McPeak having recommended that the applicant submit a fill removal report for the hill site within three months after approval is obtained from the U.S. Army Corps of Engineers to use the nearby 200-acre site for purposes of land fill; and

Supervisor Fahden having recommended that the conditions be amended to provide that development conform to the May 11, 1981 application and that a closure plan for the 22-acre site also be included, and having requested that the Public Works Department review the grading issue and report back to the Board as to whether the firm is in violation of its permit; and

Supervisor Fahden having stated that in her opinion an EIR should have been prepared for the proposal and that she would recommend that the application be denied; and

Supervisor Torlakson having expressed the opinion that the proposed conditions would mitigate the neighborhood concerns, and having moved that the application for Land Use Permit No. 2052-81 be approved as recommended by the Planning Commission and with conditions as added by the Board members (Exhibit A attached hereto and by reference made a part hereof) and that the Board certify that the Negative Declaration of Environmental Significance prepared for the proposal is adequate; and

Supervisor R. I. Schroder having seconded the motion; and

The Board in approving the aforesaid application makes the following findings:

- (1) The above action was taken in that the Board finds that the proposed expansion of the refuse disposal site was in conformance with the Solid Waste Management Plan which was approved by the State Solid Waste Management Board on March 25, 1977; and
- (2) The Board finds that the expansion of the refuse disposal site would not have an adverse effect on the health, safety and welfare of the people of Contra Costa County; and
- (3) The Board finds that the expansion of the refuse disposal site would not adversely affect orderly development of the County; and
- (4) The Board finds that with proper buffering of the site from the residential neighborhood to the west, the expansion of the refuse disposal site would not have an adverse effect on property values or adversely affect the tax base of the County; and
- (5) The Board finds that in complying with the County Solid Waste Management Plan, adverse impacts would not be created if the refuse disposal site were enlarged; and
- (6) The Board finds that the refuse disposal site expansion is in conformance with the County General Plan; and
- (7) The Board also reviewed the special conditions, exceptions or characteristics of the site and finds that they would be properly mitigated or controlled by the conditions of approval imposed by this permit; and
- (8) The Board finds that the applicant presently has a Solid Waste Permit from the Health Department for the subject site; and
- (9) The Board finds that the applicant presently has the approval of the California Regional Water Quality Control Board for the disposal of wastes on the subject site.

PASSED by the Board on July 7, 1981 by the following vote:

AYES: Supervisors Schroder, McPeak, Torlakson, Powers.

NOES: Supervisor Fahden.

ABSENT: None.

cc: Acme Fill Corporation ✓
Director of Planning
Director of Health Services
Public Works Director
County Health Department
County Counsel
Central Contra Costa
Sanitary District

B-87

CERTIFIED COPY

I certify that this is a full, true & correct copy of the original document which is on file in my office and that it was passed & adopted by the Board of Supervisors of Contra Costa County, California, on the date stated above. Attest: Clerk of said Board of Supervisors by Deputy Clerk

Wesley Nelson on *July 7, 1981*

EXHIBIT A

CONDITIONS OF APPROVAL FOR LAND USE PERMIT NO. 2052-81 AS APPROVED
BY THE BOARD OF SUPERVISORS ON JULY 7, 1981

1. Development shall be as shown on the plans submitted with the application and dated May 11, 1981 by the Planning Department subject to the conditions of approval listed below.
2. Pursuant to Section 418-4.014(d) of the County Ordinance Code, submit a Surety Company bond in the penal sum of \$10,000 prior to the issuance of the permit. If such a bond is already in force, no additional bond shall be required.
3. This permit shall be in compliance with the requirements of Solid Waste Permit No. 07-AA-002.
4. This permit is granted to Acme Fill Corporation and is not transferable.
5. Construction shall be in accordance with the specifications and recommendations set forth in the Harding-Lawson Associates report dated April 14, 1981 (5829,003.01).
6. A grading and drainage plan shall be submitted to the Public Works Department, Land Development Division, for review and approval.
7. In accordance with Section 82-2.014 of the County Ordinance Code, this project shall conform to the requirements of Division 914 (Drainage) of the Subdivision Ordinance.
8. Furnish proof to the Public Works Department, Land Development Division, that access to the property is available.
9. Applicant shall erect a fence with wood slats around the site to prevent paper and refuse from blowing onto adjacent property.
10. Access to the site shall only be along the west side of the Martinez Gun Club property.
11. Within three months of the U.S. Army Corps of Engineers decision regarding the proposed 200-acre expansion the applicant shall submit to the Board of Supervisors for its review and approval a plan to buffer the residential area to the west from the effects of landfill operations. The plan shall delineate the amount of fill required for dump operations on the 200 acres, the amount of dredge material available for use as cover and the amount of material to be removed from the low hill separating the East Vine Hill neighborhood and Acme landfill. The plan must provide for continued buffering between the two land uses.
12. The applicant shall comply with the Solid Waste Management Plan for the County.

TO Erb County - Assessor's Ofc DATE 6/11/80
FROM Brooke Fitzgerald - Ping. Dept SUBJECT AP 380-020-009

Attached is the legal description I spoke
with you on the phone about. It is
supposed to describe AP# 380-020-009.

If you could tell me what the description
actually describes I would be most grateful

SIGNED _____

PLEASE REPLY HERE

TO _____

DATE _____

JUN 17 4 42 PM '80
CONTRA COSTA COUNTY
PLS. REP.

SIGNED _____

INSTRUCTIONS - FILL IN TOP PORTION, REMOVE DUPLICATE (YELLOW) AND FORWARD REMAINING PARTS WITH CARBONS TO REPLY.
FILL IN LOWER PORTION AND SNAP OUT CARBONS. RETAIN TRIPLICATE (PINK) AND RETURN ORIGINAL.

the northern line of said East Bay Oil Recovery parcel, 1360 feet; thence north $33^{\circ} 47' 30''$ west, 257 feet to the south line of the right of way of the Southern Pacific Railway Company; thence south $70^{\circ} 17' 30''$ west, along said south line, 1402.14 feet to the most northerly corner of said Acme Pill Corp. parcel (2345 OR 294); thence south $33^{\circ} 47' 30''$ east, along the northeast line of said Acme Pill Corp. parcel, 2921.36 feet to the point of beginning.

PARCEL THREE

Portion of Section 15 and 16, Township 2 North, Range 2 West, Mount Diablo Base and Meridian and being portion of Swamp and Overflow Surveys No. 208 and 209 and a portion of the Rancho Las Juntas, Described as follows:

Beginning at a point on the southeasterly line of the 21.00 acre parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., dated January 10, 1957 and recorded January 21, 1957, under Recorder's File No. 5137 at the most westerly corner of the 45 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to Central Contra Costa Sanitary District, dated March 20, 1958 and recorded May 9, 1958 under Recorder's File No. 23050; thence from said point of beginning south $56^{\circ} 12' 30''$ west along the southeasterly line of said 21.00 acre parcel 1315.00 feet to the most southerly corner thereof; thence leaving said southeasterly line south $33^{\circ} 47' 30''$ east to a point in the center of the 10 feet in width strip of land described in the deed from Wm. Gottschalk, et ux, to California Water Service Company, recorded June 18, 1940 in Volume 549 of Official Records, at page 354; thence north $85^{\circ} 45'$ east along said center line and along the center of the 10 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to California Water Service Company recorded June 25, 1940 in Volume 546 of Official Records, at page 412 to a point in the westerly line of the hereinabove mentioned 45 feet in width strip (File No. 23050); thence north $32^{\circ} 46' 10''$ west along said westerly line to the point of beginning.

EXCEPTING THEREFROM: a right of way, not to be exclusive, as an appurtenance to the remaining lands of the grantor, for use as a roadway for vehicles of all kinds, pedestrians and animals, for water, gas, oil and sewer pipe lines, and for telephone, electric light and power lines, together with the necessary poles or conduits over that portion of Parcel One above, lying east of a line described as follows:

Beginning at the most easterly corner of Parcel One above; thence from said point of beginning south $85^{\circ} 45'$ west along the southerly line thereof 100.00 feet to the true point of beginning; thence from said true point of beginning north $4^{\circ} 15'$ west to a point on the northeasterly line of Parcel One above.

SBU SURVEYS 268, 269, 270
POR. RO. LAS JUNTAS

TAX CODE AREA

P.B.
159

WATERFRONT ROAD

270

268

268

268

159
26

Reduced 1/5 2/6

B-91

DESCRIPTION
COVERS CROSS-HATCHED
AREA.
DOES NOT COVER
ALL OF PARCEL 07

3

159
25

1962 ROLL
ASSESSOR'S MAP
BOOK 380 PAGE 02
CONTRA COSTA COUNTY, CALIF

PACHECO
CREEK

020

020
16/10

1

BOUNDARY LINE - RO. LAS JUNTAS

WALNUT CREEK (PACHECO SLOUGH)

Bob Conaty - Assessor's DATE 11-19-80
Bridget Fitzgerald - Ang SUBJECT Legal Lot Description

Could you please show me the property described as Parcel One and Parcel Two on an Assessor's Book Page. I believe they are located on page 2 of Book 380

Thank you —

SIGNED

BF

X2035

PLEASE REPLY HERE

DATE

SIGNED

All that certain real property situated in the County of Contra Costa, State of California, described as follows:

PARCEL ONE

Portion of the Southeast 1/4 of Section 9, Portion of the South 1/2 of Section 10, Portion of the North 1/2 of Section 15 and a Portion of the Northeast 1/4 of the Northeast 1/4 of Section 16 all in Township 2 North, Range 2 West, Mount Diablo Base and Meridian, containing 228.78 acres, more or less, described as follows:

Beginning on the south line of the right of way of the Southern Pacific Railroad Company, at the most northerly corner of the parcel of land described as Parcel One in the deed from Lindgren & Swinerton, Inc., et al, to Acme Fill Corp., recorded June 24, 1957 in Volume 3003 of Official Records, at page 107; thence from said point of beginning, north 71° 18' 50" east, along said south line, 1457.28 feet to the west bank of Walnut Creek, also called Pacheco Slough, as said west bank exists in October, 1957; then along said west bank and along the north bank of said Walnut Creek, as follows: South 57° 55' east, 3233.46 feet; south 44° 30' 20" east, 579.96 feet; south 18° 14' east, 400 feet; south 15° 46' west, 264 feet; south 54° 10' west, 275.75 feet; south 51° 16' west, 772.2 feet; south 43° 01' west, 471.2 feet; south 64° 15' west, 1124 feet and south 10° 31' west, 105 feet; thence north 32° 46' 10" west, 847.23 feet to the most easterly corner of the parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., recorded January 25, 1957 in Volume 2921 of Official Records, at page 16; thence north 32° 46' 10" west, along the northeast line of said East Bay Oil Recovery Co. parcel, and along the northeast line of said Acme Fill Corp. parcel (3003 OR 107), 3252.82 feet to the point of beginning.

The courses and distances herein referred to are based on California Coordinate System, Zone 3.

PARCEL TWO

Portion of the Southwest 1/4, portion of the Southeast 1/4 of Section 9 and a portion of the Northeast 1/4 of Section 16, Township 2 North, Range 2 West, Mount Diablo Base and Meridian, containing 85.79 acres, more or less, described as follows:

Beginning at an iron pipe at the most easterly corner of the parcel of land described as Parcel One in the deed from Lindgren & Swinerton, Inc. to Acme Fill Corp., recorded July 12, 1954 in Volume 2345 of Official Records, at page 294, said point of beginning being also the most westerly corner of the parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., recorded January 25, 1957 in Volume 2921 of Official Records, at page 16; thence from said point of beginning north 56° 12' 30" east, along

the northwest line of said East Bay Oil Recovery parcel, 1360 feet; thence north $33^{\circ} 47' 30''$ west, 2580.17 feet to the south line of the right of way of the Southern Pacific Railway Company; thence south $70^{\circ} 17' 30''$ west, along said south line, 1402.14 feet to the most northerly corner of said Acme Pill Corp. parcel (2345 OR 294); thence south $44^{\circ} 47' 30''$ east, along the northeast line of said Acme Pill Corp. parcel, 2921.36 feet to the point of beginning.

PARCEL THREE

Portion of Section 15 and 16, Township 2 North, Range 2 West, Mount Diablo Base and Meridian and being portion of Swamp and Overflow Surveys No. 266 and 267 and a portion of the Rancho Las Juntas, Described as follows:

Beginning at a point on the southeasterly line of the 21.00 acre parcel of land described as Parcel One in the deed from William Gottschalk, et al, to East Bay Oil Recovery Co., dated January 10, 1957 and recorded January 21, 1957 under Recorder's File No. 5137 at the most westerly corner of the 45 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to Central Contra Costa Sanitary District, dated March 20, 1958 and recorded May 5, 1958 under Recorder's File No. 23050; thence from said point of beginning south $56^{\circ} 12' 30''$ west along the southeasterly line of said 21.00 acre parcel 1315.00 feet to the most southerly corner thereof; thence leaving said southeasterly line south $33^{\circ} 47' 30''$ east to a point in the center of the 10 feet in width strip of land described in the deed from Wm. Gottschalk, et ux, to California Water Service Company, recorded June 18, 1940 in Volume 549 of Official Records, at page 454; thence north $85^{\circ} 45'$ east along said center line and along the center of the 10 feet in width strip of land described in the deed from Lindgren & Swinerton, Inc., to California Water Service Company recorded June 25, 1940 in Volume 400 of Official Records, at page 412 to a point in the westerly line of the hereinabove mentioned 45 feet in width strip (File No. 23050); thence north $32^{\circ} 46' 10''$ west along said westerly line to the point of beginning.

EXCEPTING THEREFROM: a right of way, not to be exclusive, as an appurtenance to the remaining lands of the grantor, for use as a roadway for vehicles of all kinds, pedestrians and animals, for water, gas, oil and sewer pipe lines, and for telephone, electric light and power lines, together with the necessary poles or conduits over that portion of Parcel One above, lying east of a line described as follows:

Beginning at the most easterly corner of Parcel One above; thence from said point of beginning south $85^{\circ} 45'$ west along the southerly line thereof 100.00 feet to the true point of beginning; thence from said true point of beginning north $4^{\circ} 15'$ west to a point on the northeasterly line of Parcel One above.

TAX CODE AREA

S&O SURVEYS 268, 269, 270
POR. RO. LAS JUNTAS

P.B.
159

WATERFRONT ROAD

S&O
270

BOUNDARY LINE - RO. LAS JUNTAS

WALNUT CREEK TRAUCCO SLOUGH

B-95

159
2

Rel-1

Rel-2

Rel-3

1

10
315.19 A.

9 10
16 5

S&O
269

S&O
288

63
20.02 A.

020

1962
ASSESSOR'S MAP
BOOK 330 PAGE 02

3

San Joaquin County - Assessor's Office DATE 8/20/80
Brooke Fitzgerald - Planning SUBJECT legal lot description

Attached is a legal description for a parcel which I believe is located on p 2 of Book 380. Can you please locate for me the parcel described?

RECEIVED

AUG 22 1980

ASSASSO
STANDARD

thanks

SIGNED

(Signature)

SEP 3 4 12 PM '80
CONTRA COSTA COUNTY
PLANNING DEPARTMENT

PLEASE REPLY HERE

Book -

DATE

9-2-80

I plotted the description on an overlay of Book 380 page 2 which I have enclosed.

San Joaquin County

SIGNED

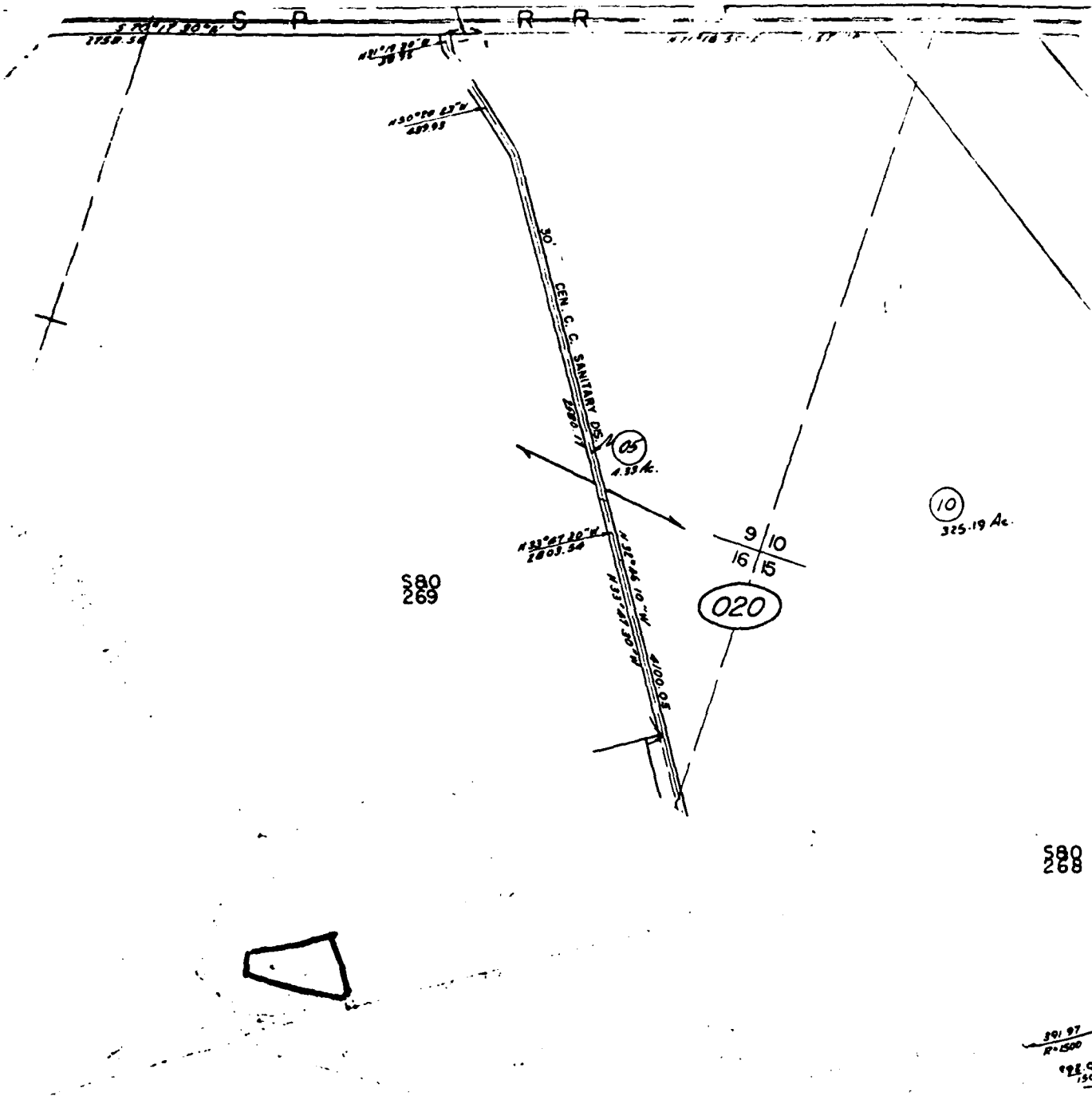
B-97

INSTRUCTIONS: FILL IN TOP PORTION, REMOVE DUPLICATE (FOLLOWING) AND FORWARD REMAINING PARTS WITH ATTACHED COPY

EXHIBIT "B"

1 That certain real property situated in the County
2 of Contra Costa, State of California, described as
follows:

3 Beginning at a point from which the most southerly
4 end of course 71 of the official Survey of the Rancho Las
5 Juntas, a certified copy of which was filed in the Office
6 of the County Recorder, Contra Costa County, California,
7 in Volume 3 of Patents, page 154, on December 31, 1880,
8 bears N.9°-48'E., 676 feet; thence from said point of
9 beginning, N.57°-53'E., 491 feet; thence S.35°-20'E., 320
10 feet; thence S.20°-43'W., 37 feet; thence S.85°-00'E.,
11 500 feet; thence N.15°-55'W., 108 feet to the point of
12 beginning, containing an area of 2.72 acres.



B-99

SIGNED _____

COUNTY: Contra Costa CITY: Landfill FOR: Acme Fill Corporation, P.O. Box 1108, Martinez, CA 94533 LOCATION: Off of Arthur Road, Martinez, California - Latitude: 30 Longitude: 122 degrees 5' W.	07-77-002 Sep. 30, 1981 DEC 4 1981 APPROVAL: [Signature] DATE: [Signature]
--	--

A. The Acme Fill Corporation applied for and obtained a permit to deposit garbage on land near Martinez, from the county Board of Supervisors on December 2, 1958. The disposal area was designated as "Service Area #3, Acme Fill Site", in "Report and General Plan for Refuse Disposal", prepared for the County Planning Commission by the County Public Works Department. The report was heard before the Planning Commission and adopted after public hearings on December 10, 1957 and January 14, 1958.

B. The land alluded to in this report are parcels one, two, and three and are legally described as "Exhibit A" of the 1973 permit. These lands are currently enumerated as follows:
 Parcels one and two (325.19 acres): Assessor's Parcel 380-020-010
 Parcel three (20.23 acres): Assessor's Parcel 380-020-009
 Total size for these parcels is approximately 345 acres.
 (Reference: Assessor's Map, Book 380, page 02, 1977-78 role).
 A review of records in the Planning Department failed to locate an existing land use permit for these parcels and apparently, only the Board permit noted above determined the status and approval for the Acme Fill site.

C. A quit claim deed, dated May 5, 1958, is on file in the County Recorder's Office (Book 3158, page 305), in which Acme Fill Corporation conveyed to Central Contra Costa Sanitary District, a strip of land 30 feet in width, and approximately 3,150 feet long, passing through Assessor's parcel 380-020-010. This parcel essentially divides the western portion from the eastern portion of this parcel. The strip was acquired for use by the Sanitary District for installation of their 72 inch outfall sewer line to Suisun Bay. The grantor reserved the right to use any portion of the area conveyed for vehicular and pedestrian traffic and further reserved the right

This permit is granted solely to the operator named above, and is not transferable. Upon a change of operator, this permit is subject to revocation. Upon a significant change in design or operation from that described in this permit or in attachments thereto for the existing design and operation of a facility operating immediately prior to August 15, 1977, or from the approved intended design and operation of a facility which was not operating prior to August 15, 1977, or which herein is granted a permit modification, this permit is subject to revocation, suspension, modification or other appropriate action.

This permit does not authorize the operation of any facility contrary to the State Minimum Standards for Solid Waste Handling and Disposal. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other government agencies.

Contra Costa County Health Department Director of Health Services	SIGNED NAME: Arnold Sterne Leff, M.D. DATE: 12/9/81
--	--

To deposit fill and garbage in the area conveyed, to the extent of covering any sewer pipe therein, to the maximum extent of twelve (12) feet.

- D. This site is classified as a Class II-1 disposal site as stated in the San Francisco Bay Regional Water Quality Control Board Resolution No. 15-37 dated April 20, 1976.
- E. Additional lands of the disposal site are described in "Report on Disposal Site Information Acme Landfill", prepared by Harding-Lawson Associates, on June 22, 1978. The report states that the total facility comprises approximately 536 acres of marshland and land presently behind dikes.
- (1) North Parcel. This area is composed of approximately 325 acres with approximately 125 acres presently being used for disposal of Group I, II and III wastes. (Note: This corresponds to parcel 380-020-010, or parcels one and two as mentioned above).
 - (2) Southern Parcel. This area is composed of about 178 acres which are designated as a source of cover material and for future fill and cover.
 - (3) The parcel containing 20.23 acres, referred to in 1B above, (parcel 380-020-009) is designated as a Class I site, however, it is understood that it is not in use at this time. (Reference: Plot plan and use map, plate #2, Harding-Lawson Associates, June 22, 1978).

NOTE 1: This is Parcel three of the land described in the 1958 Acme Fill Permit.

NOTE 2: Parcel 380-020-009, is considered as a Class I site and is therefore excluded from this permit.

- F. General description of Acme Fill lands as considered by the enforcement agency as a result of investigation of Assessor's records are as follows:

- (1) Active face (North area) - 125 acres (Western portion of parcel 380-020-010)
- (2) Future fill area (North area) - 200 acres (Eastern portion of parcel 380-020-010)

Currently an application to the Army Corps of Engineers is pending for authorization to construct two levees and the fill of approximately 200 acres of land with compacted solid wastes (Public Notice 12517-10 Department of Army, December 29, 1978).

- (3) Area considered for proposed Class I permit - 20.23 acres (excluded from this permit - Parcel 380-020-009).

- (4) Area used for cover material and for future fill - 178 acres; includes the following parcels:

<u>PARCEL NO.</u>	<u>ACREAGE</u>
159-250-006	6.39
380-030-005	7.98
380-030-008	13.45
380-030-011	9.87
380-030-017	13.98
380-030-019	0.38
380-030-024	54.43
380-030-030	55.4999
380-030-031	6.37
380-030-032	2.155
380-043-003	0.958
380-043-006	1.460
380-043-007	2.944
380-070-012	2.310
TOTAL	14 Parcels 178.61 Acres

The foregoing land area includes all of the Acme Fill site area described in the County Solid Waste Management Plan; which plan was approved by the Board of Supervisors on November 9, 1976.

- G. The projected life expectancy of this site, as stated in the "Report of Disposal Site Information", is estimated to be forty (40) years, or year 2018. This expectancy projection, however, is indefinite and subject to change dependent upon reduced waste materials due to recycling, resource recovery, changes in disposal techniques, and the ultimate configuration of the site.
- H. The applicant advises that presently an average of 1,100 tons per day of wastes are received at this facility. Types of wastes received are:
- (1) Group 1 wastes as defined in Chapter 6.5 (Section 25100 et seq) of Division 20 of the Health and Safety Code. Present limitations are contained in San Francisco Water Quality Control Board Waste Discharge Requirement Order No. 76-37. (Class II-1 permit).
 - (2) Group 2 wastes.
 - (3) Group 3 wastes.
- I. Hazardous wastes are accepted at this site. Resource recovery operations are conducted at this site. The site is open seven days a week from 7:00 a.m. to 5:00 p.m. to commercial accounts and the public. Special arrangements are available to commercial customers for access at any time. The design and operation of this facility as it existed before August 15, 1977, are as described in the following documents, which are hereby made a part of this permit:
- (1) Applicants' Report of Disposal Site Information, dated June 22, 1978.

- (1) Solid Waste Site Development, Harding-Lawson Associates, Inc., May 6, 1975.
- (2) Acme Landfill Operations Manual.

3. Acme Fill Corporation applied for and the Board of Supervisors on July 7, 1981 granted a Land Use Permit (2052-81) for the use of 22 acres of a 55 acre parcel (380-030-030) as a refuse disposal site. At the same time the Board of Supervisors certified the Negative Declaration of Environmental Significance to be adequate. Acme Fill Corporation, also, filed an operations plan by Harding-Lawson Associates for the 22 acres, titled "Revision to Report of Disposal Site Information, Acme Landfill, Martinez, California" and dated September 21, 1981. On May 13, 1981 the San Francisco Bay Region, California Regional Water Quality Control Board issued conditional approval for the 22 acre site.

K. The conditions as hereinafter set forth are intended to assure the health, safety, and welfare of the citizens of Contra Costa County during that period in which the landfill remains in active operation and to reduce the possibility of adverse environmental impacts after such operations have been terminated. Such conditions and regulations as later set forth are in no way intended to relieve the operator of any conditions imposed upon it by other regulating bodies but are intended as a supplement to such regulations, and therefore the following documents, but not limited to only these documents, are hereby made a part of this permit:

- (1) California Regional Water Quality Control Board, San Francisco Bay Region Waste Discharge Requirement No. 76-37.
- (2) Bay Area Air Quality Management District regulations.
- (3) Resolution, December 2, 1958, by Contra Costa County Board of Supervisors granting a permit to deposit garbage.
- (4) State Department of Health Services - Hazardous Waste Materials permit (pending).
- (5) Corps of Engineers reports and permits.
- (6) Provisions of the Ordinance Code of Contra Costa County.
- (7) Local Fire District Ordinances.
- (8) Quit Claim Deed from Acme Fill Corporation to Central Contra Costa Sanitary District, dated May 5, 1958.
- (9) Contra Costa County Land Use Permit 2052-81.
- (10) Negative Declaration of Environmental Significance, Contra Costa Planning Department, August 7, 1981.
- (11) Revision to Report of Disposal Site Information, Harding-Lawson Associates, September 21, 1981.
- (12) Letter dated May 13, 1981 from San Francisco Bay Region, California Regional Water Quality Control Board to Acme Fill Corporation

No changes in design or operation of this facility may be undertaken or implemented except as authorized by this permit. However, note is taken that the Acme Fill Corporation will continue to explore the feasibility of energy recovery and material recycling which may affect the future operation and design of this facility.

Acme Landfill - Solid Waste Facilities Permit
Contra Costa County

Reactive Date: 050 4/931
Page 5 of 7

3. Land within 1,000 feet of this site is zoned Residential and Industrial.
4. This facility is consistent with the latest version of the Contra Costa County Solid Waste Management Plan.
5. This permit is consistent with the latest version of the Contra Costa County Solid Waste Management Plan and is also consistent with the State Minimum Standards for Solid Waste Handling and Disposal.

CONDITIONS:

Requirements:

1. The design and operation of this facility must comply with all of the State Minimum Standards for Solid Waste Handling and Disposal.
2. The design and operation of this facility must comply with all federal, state, and local requirements and enactments.
3. Additional information concerning the design and operation of this facility must be furnished upon request of the enforcement agency. Any pilot study, research or experimental activities which would or may alter the conceptual or real design or operation of this facility, either temporarily or permanently, must be submitted in writing to the enforcement agency for approval before undertaking or implementing such activity.
4. Whenever the operator is requested, required or directed to submit reports, letters, maps or other communications to the enforcement agency as indicated in this permit, such communications shall be by U.S. mail, unless hand delivered and addressed to:

The Contra Costa County Solid Waste Enforcement Agency
P.O. Box 871, Martinez, California 94553
By telephone: (415) 372-2521

Prohibitions:

The following actions are prohibited at the facility:

1. Open burning
2. Scavenging
3. Discharge of fire arms without prior written approval of the enforcement agency
4. Animal grazing on active areas of the facility

Specifications:

No significant change in design or operation from that described in Items #1 and #2 of the FINDINGS Section is allowed, except for those changes which are required under the CONDITIONS portion of this or as approved by the enforcement agency.

1. The ridgeline west of the 22 acre portion of parcel #380-030-030 shall not be impaired as a buffer between the landfill site and the East Vine Hill residential area during the landfilling of the 22 acre site.

Provisions:

1. It is hereby declared to be the intent that if any condition or limitations of this permit are held to be invalid, this shall not invalidate the remaining conditions and limitations of the permit. The following provisions must be met:
 - a. 17681 Availability of Cover Material. Before October 1 of each year cover material sufficient to cover at least two weeks of solid wastes shall be stockpiled near the active wet weather disposal face. The stockpile shall be rebuilt as soon as weather permits.
 - b. 17682 Cover (H). Daily cover means that solid wastes are not exposed for longer than 24 hours.
 - c. 17701 Nuisance Control. When the disposal site operator fails to correct a public nuisance within the time limit stated by the enforcement agency, the enforcement agency shall have the authority to have the nuisance abated. The operator shall file with the enforcement agency a bond (the amount to be determined), acceptable to the County Counsel, upon which the enforcement agency may draw to abate any nuisance or hazard or to assure that the disposal site standards of Article 7, Chapter 3, Division 7, Title 14, California Administrative Code are met.
 - d. 17703 Fire Control. The operator shall report each fire to the local fire department immediately and to the Sheriff's Department and the enforcement agency as soon thereafter as practicable.
 - e. 17704 Leachate Control. The operator shall submit to the enforcement agency a copy of each report submitted to the San Francisco Bay Regional Water Quality Control Board.
 - f. 17713 Odor Control. The operator shall obtain written approval from the enforcement agency before uncovering or relocating any wastes.
 - g. 17714 Traffic Control. The operator shall provide, in cooperation with others, a new road to the disposal site from Waterfront Road, which presently appears to be the most appropriate. The road shall meet the requirements of the County Public Works Department. The Arthur Road access shall be terminated on or before April 1, 1982.
2. This facility may accept those hazardous wastes specified in Waste Discharge Requirement No. 76-37 and amendments, if they are handled in accordance with provisions of Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code and the regulations promulgated thereunder.
3. This permit shall be reviewed annually during April by the operator. The operator shall notify the local enforcement agency in writing of any proposed changes to the permit 30 days prior to the beginning of the review period, advising the enforcement agency of recommendations for modification if appropriate.

Acme Landfill - Solid Waste Facilities Permit
Contra Costa County

Effective Date: Dec. 4, 1977
Page 7 of 7

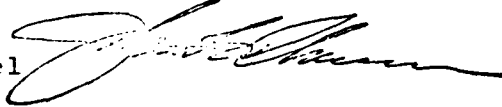
4. This permit is subject to review by the enforcement agency, and may be suspended, revoked or modified at any time, if in the opinion of the enforcement agency additional provisions need to be added or rescinded as a result of local conditions. The local enforcement agency must advise the operator of the intent to modify the permit at least 30 days prior to commencing revision and shall be allowed an additional fee as provided by ordinance to recover the cost of such permit revision.
5. This permit is a revision of the original permit issued May 21, 1973.

COUNTY COUNSEL'S OFFICE
CONTRA COSTA COUNTY
MARTINEZ, CALIFORNIA

Date: July 10, 1981

To: Supervisor Nancy Fahden

From: John B. Clausen, County Counsel



Re: Excavation & grading by Acme Fill

The excavation and placing of cover is exempt from grading permit requirements by Ordinance Code Section 716-4.206 (attached).

The grading for the dirt road is probably exempt under §716-4.204 or §716-3.208(2), but you may want to check this out with Mr. Giese, the Building Inspector.

As to whether Acme Fill requires a reclamation plan for the excavation of dirt from the hill for solid waste cover, we refer you to our Ordinance Code chapter 88-11 and Calif. Public Resources Code §2710 and following. Our ordinance merely implements state law. This state law and our ordinance are intended to regulate "surface mining operations" which are defined in Pub.Res.Code §2735 as follows:

"Surface mining operations" means all, or any part, of the process involved in the mining of minerals on mined lands by removing overburden and mining directly from the mineral deposits, open-pit mining of minerals naturally exposed, mining by the auger method, dredging and quarrying, or surface work incident to an underground mine. Surface mining operations shall include, but are not limited to:

- (a) Inplace distillation or retorting or leaching.
- (b) The production and disposal of mining waste.
- (c) Prospecting and exploratory activities.

In my opinion the Acme solid waste disposal operation is not subject to this state law or our ordinance.

cc: Supervisors Power, Schroder, McPeak, Torlakson
Building Inspection
Planning

JBC:eg

**Article 716-4.2
Required**

716-4.202 Required - Generally. (a) Except as specified in Sections 716-4.202 - 716-4.208, no person shall grade without having a valid permit as provided in this chapter.

(b) Notwithstanding the provisions of Section 716-4.208, a permit is required for all subdivisions as defined in Title 9, and all other projects for which a governmental agency has specified a permit as being required as a condition of approval.

(c) A separate permit is required for work on each site, unless the sites are contiguous and the entire area is included in the plans accompanying the application.

(d) Grading permits for work on property on which a subdivision or development requiring approval of a tentative map is proposed shall not be issued until reviewed by the public works department for compliance with the requirements of Title 9. (Ord. 69-59 § 1 (part), 1969).

716-4.204 Required - Minor grading excepted. A grading permit is not required for:

(1) An excavation which:

(A) Is less than five feet in depth below natural grade and adequately supported by a retaining structure designed in accordance with Section 2310 U.B.C. (1967), or

(B) Does not create a cut slope greater than seven feet in height and steeper than two horizontal to one vertical, or

(C) Does not exceed two hundred cubic yards;

(2) A fill not intended to support structures and which does not obstruct a drainage course if:

(A) Such fill is placed on natural grade that has a slope not steeper than five horizontal to one vertical, or

(B) Is less than three feet in depth at its deepest point, measured vertically upward from natural grade to the surface of the fill, or

(C) Does not exceed two hundred cubic yards;

(3) Minor land leveling for agricultural farming, if the average ground elevation is not changed more than three feet;

(4) Cemetery graves. (Ord. 69-59 § 1 (part), 1969).

716-4.206 Required - Types of grading excepted.* A grading permit is not required for:

(1) An excavation below finished grade for basements and footing of structures authorized by a valid building permit or trench excavations for the purpose of installing underground utilities, if to be backfilled to natural grade;

(2) Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate, or clay, for which a permit has been granted by the board of supervisors, provided that such operations do not affect the lateral support or increase the stresses in, or pressure upon, any adjacent or contiguous property;

(3) Improvement of watercourses and construction of drainage, irrigation, and domestic water supply systems and facilities performed under the supervision of the flood control district, an agency of the federal or state government, a water or sanitation district, or an irrigation or reclamation district;

(4) The construction, repair and maintenance of levees for river and local drainage control performed by a governmental agency;

(5) Refuse and garbage disposal sites controlled by other regulations;

(6) Emergency work, as authorized by the building official, necessary to protect life, limb or property, or to maintain the safety, use or stability of a public way or drainage way. (Ord. 69-59 § 1 (part), 1969).

716-4.208 Required - Other exceptions. A grading permit is not required for:

(1) Excavations for installation of underground storage tanks where the capacity of the tank does not exceed twenty thousand gallons;

(2) Grading in an isolated, self-contained area if the building official determines that no danger to private or public property is likely to result from the grading operations;

(3) The structural section of subdivision streets in tracts for which subdivision improvement plans have been reviewed by the public works department and the work is being inspected by that department under Title 9;

(4) Temporary local borrow pits for road materials and top soil for landscaping situated within a larger ownership being subdivided into smaller tracts, if the material is being used entirely within the tracts being subdivided, and

*For drainage permits, see Ch. 1010-4, this code.

ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER FCAD041835695																			
I. EPA I.D. NUMBER II. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		GENERAL INSTRUCTIONS If a preprinted label has been provided, fill it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for additional item instructions and for the legal authorizations under which this data is collected.																			
ACME FILL CO* PO BOX 1109 MARTINEZ, CA 94553		19 NOV 1980																			
II. POLLUTANT CHARACTERISTICS INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.																					
SPECIFIC QUESTIONS		SPECIFIC QUESTIONS																			
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">MARK X</th> </tr> <tr> <th style="width: 33%;">YES</th> <th style="width: 33%;">NO</th> <th style="width: 33%;">SUPP. FORM ATTACHED</th> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">20</td> <td style="text-align: center;">21</td> </tr> </table>		MARK X			YES	NO	SUPP. FORM ATTACHED	19	20	21	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">MARK X</th> </tr> <tr> <th style="width: 33%;">YES</th> <th style="width: 33%;">NO</th> <th style="width: 33%;">SUPP. FORM ATTACHED</th> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">20</td> <td style="text-align: center;">21</td> </tr> </table>		MARK X			YES	NO	SUPP. FORM ATTACHED	19	20	21
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C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)																			
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22	23	24																			
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)																			
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G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)																			
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I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)																			
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YES	NO	SUPP. FORM ATTACHED																			
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III. NAME OF FACILITY 1 ACME FILL CORPORATION																					
IV. FACILITY CONTACT 2 A. NAME & TITLE (Last, first, & title) OLNEY, JR. BOYD M. PRESIDENT B. PHONE (Area code & number) 415 685 4711																					
V. FACILITY MAILING ADDRESS 3 A. STREET OR P.O. BOX P.O. BOX 23164 B. CITY OR TOWN PLEASANT HILL C. STATE CA D. ZIP CODE 94523																					
VI. FACILITY LOCATION 4 A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER END OF ARTHUR ROAD B. COUNTY NAME CONTRA COSTA C. CITY OR TOWN 5 KM E MARTINEZ D. STATE CA E. ZIP CODE 94553 F. COUNTY CODE 013																					

CONTINUED FROM THE FRONT

VIII. SIC CODES (4 digit, in order of priority)

A. FIRST 7 4 9 5 3 (specify) Sanitary landfill				B. SECOND 7 (specify)			
C. THIRD 7 (specify)				D. FOURTH 7 (specify)			

VIII. OPERATOR INFORMATION

A. NAME ACME LANDFILL												B. Is the name listed in Item VIII A also the owner? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
--------------------------	--	--	--	--	--	--	--	--	--	--	--	---	--

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box. If "Other", specify.) F = FEDERAL M = PUBLIC (other than federal or state) P = PRIVATE S = STATE O = OTHER (specify)										D. PHONE (area code & no.) A 4 1 5 6 8 5 4 7 1 1	
---	--	--	--	--	--	--	--	--	--	---	--

E. STREET OR P.O. BOX P. O. BOX 2 3 1 6 4											
--	--	--	--	--	--	--	--	--	--	--	--

F. CITY OR TOWN PLEASANT HILL						G. STATE CA		H. ZIP CODE 9 4 5 2 3		I. INDIAN LAND Is the facility located on Indian land? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
----------------------------------	--	--	--	--	--	----------------	--	--------------------------	--	--	--

C. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water) N						D. PSD (Air Emissions from Proposed Sources) 9 P					
B. UIC (Underground Injection of Fluids) U						E. OTHER (specify) NO 7 6 - 3 7 (specify) California Regional Water Quality Control Board					
C. RCRA (Hazardous Wastes) R						E. OTHER (specify) 0 7 - AA - 0 0 2 (specify) State Solid Waste Management Board					

I. MAP

Attach 1 on a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

I. NATURE OF BUSINESS (provide a brief description)

Acme Fill Corporation operates a sanitary landfill permitted by the State of California Regional Water Quality Control Board as a Class II-1 disposal facility. Class II wastes and certain types of hazardous Class I wastes are permitted for disposal at the facility.

I. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in this application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME & OFFICIAL TITLE (type or print) Royd M. Olney, Jr., President		B. SIGNATURE <i>Royd M. Olney, Jr.</i>		C. DATE SIGNED 3/19/81	
--	--	---	--	---------------------------	--

AGENTS FOR OFFICIAL USE ONLY

1. NEW OR REVISED APPLICATION

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

- ☐
2. NEW FACILITY (Complete item below)

YR.		MO.		DAY	
73	34	16	76	77	14

PROVIDE THE DATE
(MONTH AND DAY) OPERA-
TION BEGAN OR IS
EXPECTED TO BEGIN.

☐ 1. FACILITY HAS INTERIM STATUS

- ☐ 2. FACILITY HAS A RCRA PERMIT

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. **AMOUNT** — Enter the amount.
2. **UNIT OF MEASURE** — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<u>Storage:</u>			<u>Treatment:</u>		
CONTAINER (barrel, drum, etc.)	501	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	502	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	503	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR
SURFACE IMPOUNDMENT	504	GALLONS OR LITERS			GALLONS PER HOUR OR LITERS PER HOUR
<u>Disposal:</u>					
INJECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY
LAND APPLICATION	D81	ACRES OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS			
	UNIT OF MEASURE CODE			UNIT OF MEASURE CODE	
UNIT OF MEASURE		UNIT OF MEASURE			UNIT OF MEASURE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

DUP													
LINE NUMBER	A. PROCESS CODE (from list above)			B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)			B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
	1	2	3	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)			1	2	3	1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S	0	2	600	G		5						
X-2	T	0	3	20	E		6						
1	D	8	0	370	A		7						
2							8						
3							9						
4							10						

mirrored from the front.

PROCESSES (continued)

SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

DESCRIPTION OF HAZARDOUS WASTES

EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

PROCESSES

PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above, (2) Enter "000" in the extreme right box of Item IV-D(1), and (3) Enter in the space provided on page 4, the line number and the additional code(s).

PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

E: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.

Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 500 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
			1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
K 0 5 4	900	P	T 0 3 D 8 0	
D 0 0 2	400	P	T 0 3 D 8 0	
D 0 0 1	100	P	T 0 3 D 8 0	
D 0 0 2				included with above

Continued from page 2.

NOTE: Photocopy this page before completing. You have more than 26 waste to report.

Form Approved

EPA ID NUMBER (enter from page 1)										EPA REGION										EPA OFFICE									
K049										W										DUP									

IV. DISPOSITION OF HAZARDOUS WASTES (continued)

1	A. EPA HAZARDOUS WASTE NO. (enter code)				C. UNIT OF MEASURE (enter code)	D. PROCESSES										2. PROCESS DESCRIPTION (if a code is not entered in 1, describe)									
	1	2	3	4		17	18	19	20	21	22	23	24	25	26										
1																									
2	K	0	4	9	3025	T	D	8	0																
3	P	1	1	0	34	T	D	8	0																
4	P	1	2	0	included with above																				
5	U	0	1	3	120	T	D	8	0																
6																									
7																									
8																									
9																									
10																									
11																									
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24																									
25																									
26																									

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)									
9									
F									

V. FACILITY DRAWING

All existing facilities must include a drawing of the facility showing the location of the existing storage, treatment and disposal areas, and sites of future storage, treatment or disposal areas (see instructions for more details).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate an existing facility, existing storage, treatment and disposal areas, and sites of future storage, treatment or disposal areas (see instructions for more details).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)				LONGITUDE (degrees, minutes, & seconds)			
3	8	0	1	3	0	-	

VIII. FACILITY OWNER

☒ **A.** If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the right and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER				2. PHONE NO. (area code, city)			
Acme Fill Corporation				415-685-4722			
3. STREET OR P.O. BOX				4. CITY OR TOWN		5. ST.	6. ZIP CODE
P. O. Box 23164				Pleasant Hill		CA	94523

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all other documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
Boyd M. Olney, Jr.	<i>Boyd M. Olney Jr.</i>	11/19/80

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all other documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
Boyd M. Olney, Jr.	<i>Boyd M. Olney Jr.</i>	11/19/80

A hand-drawn map of the Acme Landfill. The map is oriented with North at the top, indicated by a north arrow. A scale bar at the bottom left shows distances of 500, 0, 500, and 1000 feet. The map is divided into several labeled areas: 'CURRENT LANDFILL AREA' in the upper left, 'FUTURE LANDFILL AREA (1000-1500 FT ELEVATION)' in the upper right, 'EXISTING LANDFILL AREA' in the center, 'COVER MATERIAL STORAGE AREA' in the lower left, 'FUTURE LANDFILL AREA' in the lower right, and 'SOIL TRAIL' at the bottom. Elevation contours are marked with dashed lines and labels such as 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000. A 'DRAINAGE' line is shown flowing from the center towards the bottom right. A 'ROAD' is indicated on the left side. A 'WATER' feature is shown in the bottom right corner. A 'TRAIL' is marked at the bottom. A 'FENCE' is shown along the bottom edge. A 'DRAINAGE' line is shown flowing from the center towards the bottom right. A 'ROAD' is indicated on the left side. A 'WATER' feature is shown in the bottom right corner. A 'TRAIL' is marked at the bottom. A 'FENCE' is shown along the bottom edge.

FPA Form 2510-3 (7-83)

PAUL 4615

APPENDIX C

EARTH

	<u>PAGE</u>
Geologic Time Schedule	C-1
Typical Engineering Properties of San Francisco Bay Mud	C-2
Estimated Maximum Parameters for known Faults Affecting Contra Costa County	C-4

GEOLOGIC TIME SCALE

Relative Time

Specific Time Estimates

	Relative Time		Specific Time Estimates	
	Era	Period	Epoch	Years Ago to Opening of:
Phanerozoic	Cenozoic	Quaternary	Recent (Holocene)	10 thousand
			Pleistocene	2-3 million
		Tertiary	Pliocene	7 million
			Miocene	25 million
			Oligocene	40 million
			Eocene	60 million
			Paleocene	70 million
	Mesozoic	Cretaceous		135 million
		Jurassic		180 million
		Triassic		225 million
	Paleozoic	Permian		270 million
		Pennsylvanian*		325 million
		Mississippian*		350 million
		Devonian		400 million
		Silurian		440 million
		Ordovician		500 million
		Cambrian		600 million
	Precambrian			4600 million

* Sometimes grouped together as the Carboniferous

Taken from Geology of California
Norris & Webb, 1976

TABLE

TYPICAL ENGINEERING PROPERTIES OF SAN FRANCISCO BAY MUD

Property	Value
Saturated Unit Weight	94 pcf
Natural Water Content (%)	90
Liquid Limit (%)	88
Plasticity Index (%)	40
Liquidity Index (%)	1
Organic Content (Total carbon - %)	1.5
Compression Index C_c Just past p_p'	1.2-1.8 (1.5-average)
For $p' > 2-3 \text{ kg/cm}^2$.8-.9
Recompression Index C_r	.10-.15
Coefficient of Secondary Compression C_α	.01-.02
Coefficient of Consolidation, C_v	8-10 ft^2/year
Effective Stress Friction Angle, ϕ' Consolidated undrained triaxial	32.5°-35° (34° average)
Vertical Plane Strain C-U	38°
Horizontal Plane Strain C-U	35°
Consolidated Drained	31°
Undrained Strength Ratio S_u/\bar{p}	
IC-U	.34
AC-U (K_o)	.35
UU	.32
Field Vane	.31-.32
Cone Penetrometer	.31-.32
Self Boring Pressuremeter	.40
IC-U Data Extrapolated (to an OCR of 1.1-1.5)	.36-.42

TABLE
(cont'd)

TYPICAL ENGINEERING PROPERTIES OF SAN FRANCISCO BAY MUD

Property	Value
Undrained Strength Ratio-Continued	
Vertical Plane Strain	.29
Horizontal Plane Strain	.37
Creep Parameters	
(Undrained Creep on CU Samples)	
α	4.45
A	.0035%/minute
m	.7-.8
Overconsolidation Ratio	
Crust	3
"Normally Consolidated Zone	1.0-1.5

From: "The Properties of San Francisco Bay Mud at Hamilton Air Force Base, California", Bonaparte, Rudolph and Mitchell, James K., Geotechnical Engineering Department of Civil Engineering, University of California, Berkeley, 1979.

TABLE 2

ESTIMATED MAXIMUM PARAMETERS FOR KNOWN
FAULTS AFFECTING CONTRA COSTA COUNTY

		San Andreas Fault	Hayward and Calaveras Faults	Concord and Green Valley Faults
Estimated Magnitude ¹ (Richter Scale)		7 to 8.25	6 to 7.5	6 to 7
Estimated Fault Offset ² (feet)		4 to 30	1 to 8	1 to 4
Estimated Duration Strong Shaking ³ (seconds)		24 to 37	5 to 30	5 to 24
Estimated Length of Tectonic Rupture ⁴ (miles)		40 to 300	5 to 70	5 to 25
Estimated Maximum Intensity ⁵ (M.M.)		VII to VIII	IX to X	VIII to IX
Estimated Peak Horizontal Accelerations in Bedrock ⁶ (g's)				
Distance from Causative Fault	at 5 miles	over .50	over .35	over .35
	at 10 miles	.35 to .50	.25 to .35	.25 to .35
	at 20 miles	.20 to .35	.10 to .30	.10 to .25
	at 30 miles	.10 to .25	.05 to .20	.05 to .15
	at 40 miles	.05 to .20	.05 to .15	less than .1
	at 50 miles	.05 to .15	less than .1	less than .1

EXPLANATION

Earthquake acceleration is expressed as a fraction of gravity (g). Thus an acceleration of .5g corresponds to an acceleration which is 50% of the value of gravity. At a distance of 10 miles from the San Andreas fault, earthquake accelerations in bedrock are expected to be between .35g and .5g. Local ground conditions and other factors could either increase or decrease expected accelerations.

NOTE: The estimated maximum parameters are intended as estimates of the maximum earthquake characteristics that appear capable of occurring given presently known seismological and geological conditions. It should be recognized that (1) the approximations which are presented are for comparative purposes only, (2) there are differences of opinion among professionals on the reliability of such estimates, and (3) the approximations which are presented are not intended as design criteria for structures.

Source: Contra Costa County Planning Department - 1975.

APPENDIX D

WATER

	<u>PAGE</u>
1. History of Compliance With RWQCB No. 76-37	D-1
2. Water Quality Variation in Observation Wells	D-2
3. Leachate Water Quality - Metals	D-2
4. Location of Past Leachate Seeps and Streams	D-3
5. Leachate Depth Below Surface From Observation Wells	D-4
6. Variation in Groundwater Depth Between Active Landfill and 200-Acre Area Site	D-4

TABLE : History of Compliance with RWQCB Order No. 6-37

April 1976	RWQCB issues Order No. 76-37 establishing October 1, 1977 as the compliance date for ??
January 1977	Acme submits action plan to meet schedule.
September 1977	Acme request one year extension, to October 1978, inability to obtain Corps of Engineers permit.
November 1977	RWQCB issues Order No. 77-139 granting Acme a two year extension, until October 1979. Board requires compliance whether or not Corps permit obtained.
August 1978	Acme submits revised plans for compliance.
October 1978	RWQCB states submittal was incomplete. Request alternative plan by November 15, 1978.
October 1978	Landslide slips along eastern face of landfill, moving sewer-line.
November 1978	RWQCB grants Acme extension until February 1, 1979.
January 1979	Acme submits alternative plan. RWQCB requests specific information on plan. Acme submits additional information. RWQCB requests more specific information to evaluate the plan.
March 1979	RWQCB asks Acme again for specific information on plan. RWQCB staff observe leachate leaving Acme site.
April 1979	Acme submits additional information.
May 1979	RWQCB issues Clean-up and Abatement Order No. 79-008 requiring immediate abatement of leachate leaving site and permanent leachate containment by October 1, 1979.
August 1979	Acme begins work on leachate barrier.
September 1979	Acme states project being delayed because of sewer line relocation and possibility of heavy winter rains. Requests 10 month extension until July 31, 1980.
December 1979	Acme stops work on leachate barrier because of wet weather.
May 1980	RWQCB request Acme to complete the required work immediately and submit a plan and time schedule.
July 1980	Acme submits description of work to be completed by August 31, 1980. Acme states the remainder of work would be completed at a later date due to more slippage at the site.
August 1980	RWQCB notifies Acme of intent to refer matter to Attorney General if work not completed.
August 1981	Acme and RWQCB meet in court. A new compliance schedule is agreed upon.
March 1982	As of this date, Acme has been completing the construction work in accordance with the new schedule.

Source: San Francisco Bay Regional Water Quality Control Board, Project File 2219.1067. Information from 1976 through 1982.

Water Quality Variation in Observation Wells

	<u>Typical Leachate</u>	<u>Well G3</u>	<u>Well G4</u>	<u>Well G5</u>
Depth to Water (ft)		6.5 - 12.0	Under water - 7.0	3.0 - 9.0
Chloride (mg/l)	2,300	2,800 - 5,600	2,500 - 23,000	7,800 - 10,000
Total Organic Carbon (mg/l)	3,000	25 - 70	61 - 230	49 - 150
Nitrate N. (mg/l)	0.45	0.43 - 99.	0.2 - 3.0	0.26 - 3.0
Total Dissolved Solids	4,300	5,900 - 10,000	38,000 - 45,000	17,000 - 18,000
pH	7.5	6.2 - 7.3	6.2 - 6.4	6.9 - 7.2

(Source: Typical leachate values ^{from} Reference ⁷ ~~4~~; Well data ^{from} 1981 annual report Acme Landfill to RWQCB, Harding Lawson Associates).

Leachate Water Quality

<u>Metal (mg/l)</u>	<u>Permitted Levels</u>	<u>Leachate Sampled</u>	<u>Ponded Water</u>
Cadmium	0.01	0.45	0.05
Chromium	0.05	31.0	110.0
Copper	0.02-.06	0.5	1.9
Lead	0.05	41.0	31.0
Mercury	0.005	0.0003	.0001
Zinc	0.01	260.0	36.0

(Source: Permitted levels from reference ¹⁵ ~~13~~; Water quality sample data from RWQCB, 1979).

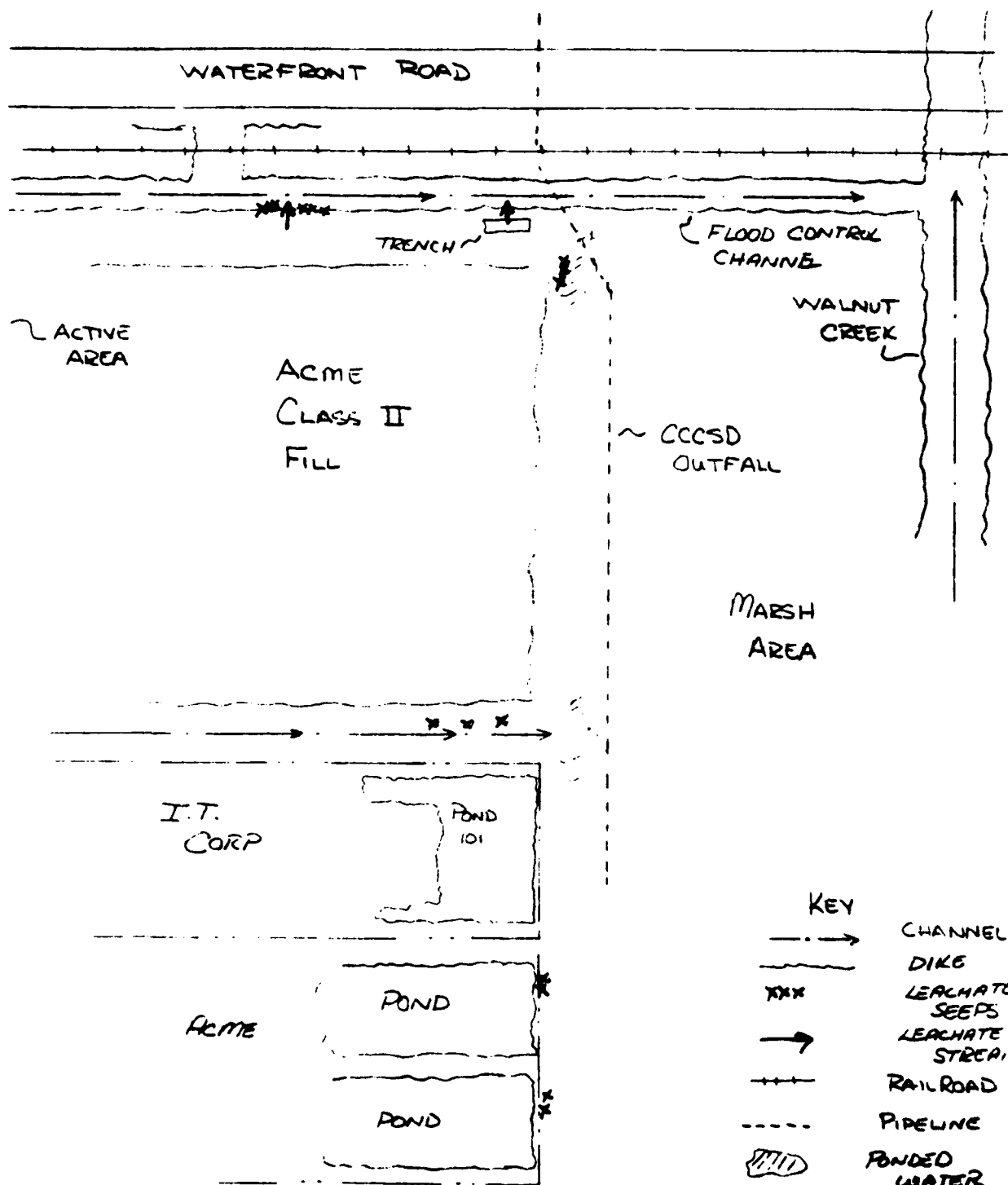


Figure A Location of port leachate seeps and streams.

NOT TO SCALE

(Source:)

D-3

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION	
ACME FILL CORP	
DRAWN BY H.L.	DATE 5-11-79

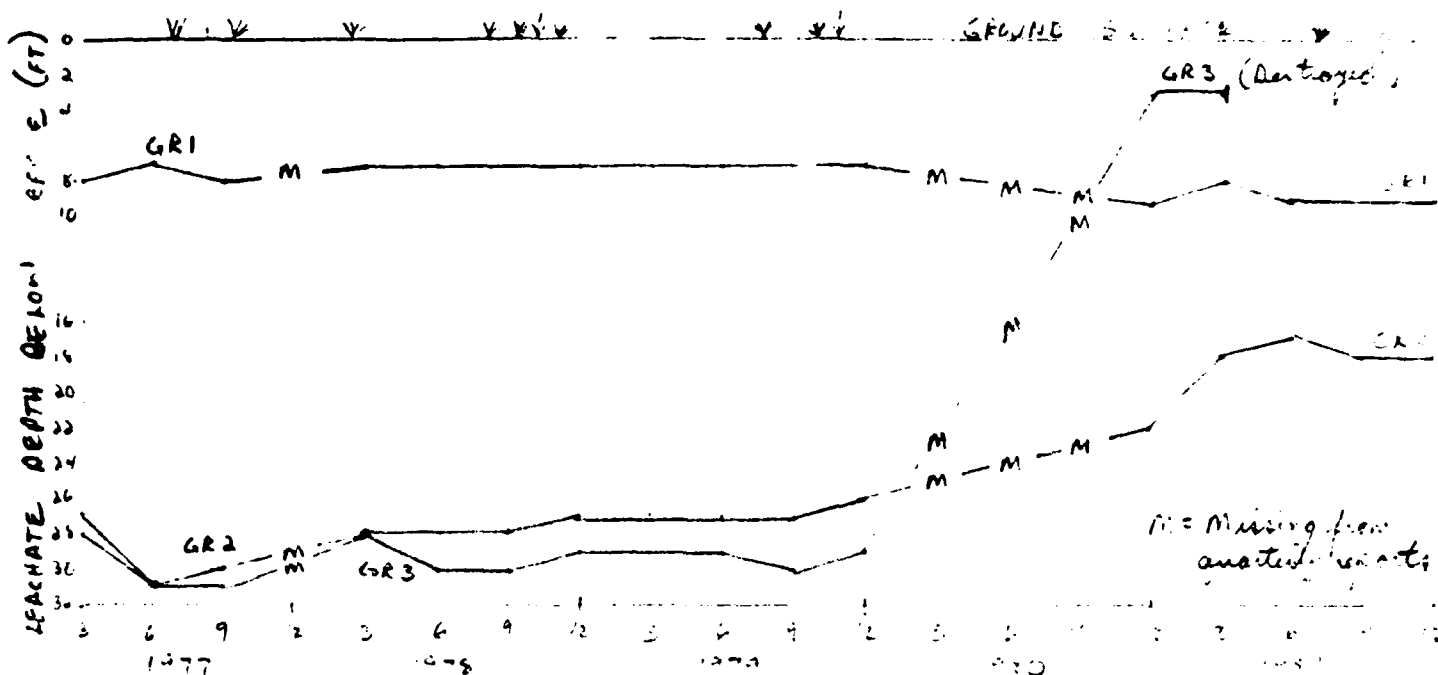


Figure C. Leachate depth below surface from observation wells
(Source: Quarterly reports submitted by owner to the RWQCB).

(↓ this figure not used)

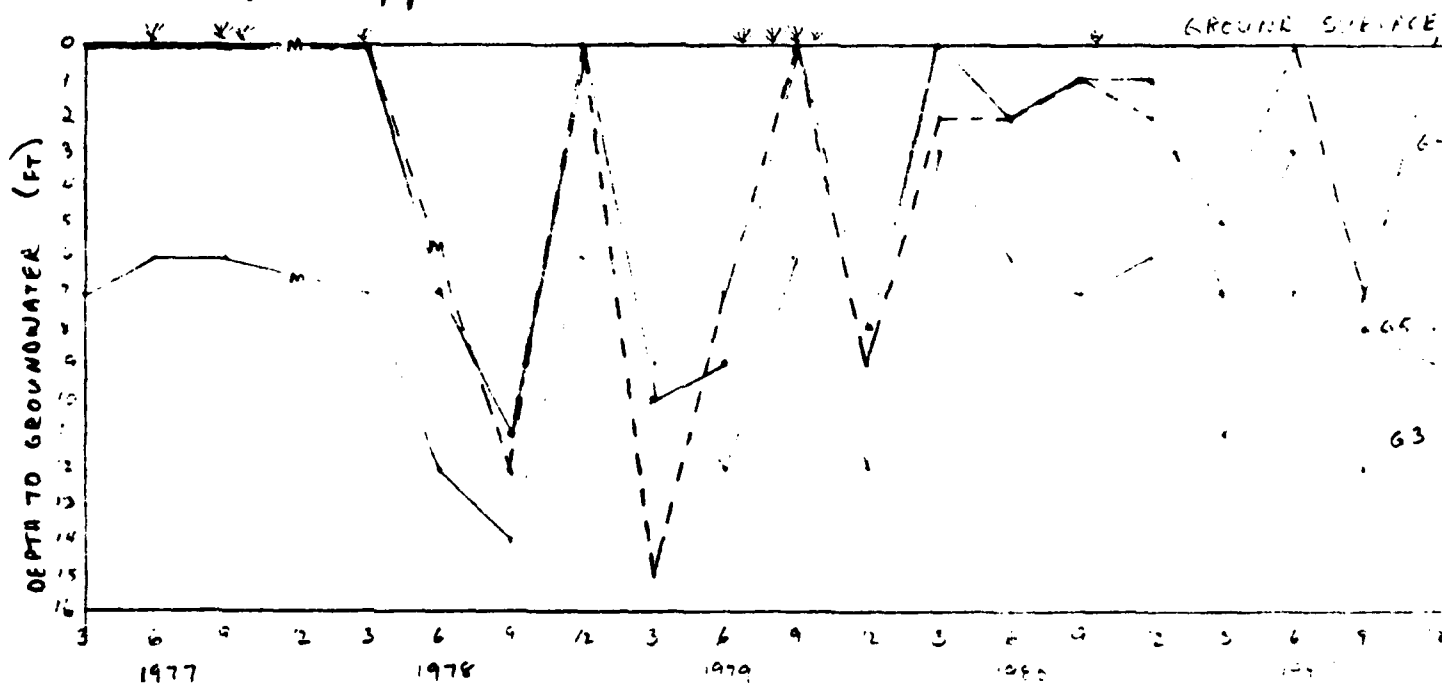


Figure. Variation in groundwater depth between active landfill and 200-acre new site

(Source: Quarterly reports submitted by owner to the RWQCB).

APPENDIX E

BIOTA

	<u>PAGE</u>
U.S. Fish and Wildlife Service - Summary Letter of Habitat Evaluation Procedure (HEP) Analysis	E-1
Memorandum of Understanding Between Acme Fill and California Department of Fish and Game	E-6
Bird Species Observed in the Shell Marsh and Vicinity	E-8



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services
2800 Cottage Way, Room E-2727
Sacramento, California 95825

September 14, 1979

Colonel John M. Adsit
San Francisco District, Corps of Engineers
211 Main Street
San Francisco, California 94105

Subject: PN 12517-10, Acme Fill Corporation, Martinez, California

Dear Colonel Adsit:

This responds to your request of July 18, 1979 that the Service conduct a field investigation and perform a Habitat Evaluation Procedures (HEP) analysis on the approximate 200 acres the applicant proposes to fill near Martinez. The site is located to the north, east, and west of an existing Acme landfill. The plan provided in the public notice indicates that about 168 acres located immediately east of the existing landfill and the proposed Contra Costa County Central Sanitary District pipeline route would be filled. In addition, approximately 18 acres of land located to the north and west of the existing landfill and bounded by Waterfront Boulevard is proposed for filling. About 14 acres of the project area could not be filled because the Regional Water Quality Control Board has forbidden the placement of fill within 200 feet of the pipeline route.

It is Service policy to oppose nonwater-dependent projects which involve the filling of wetlands, particularly when alternative upland sites are available [refer to Federal Register, December 1, 1979, section 2-2(B)]. In that connection, Acme has indicated that it presently fills at the rate of about 5 acres per year and that about 10 years would be required to establish an alternative centralized waste site.

The project area supports about 91 acres of seasonal-wetland vegetation composed largely of pickleweed, fathen, and brass buttons. About 95 acres of the project area supports lowland-grassland vegetation comprised of annual and perennial forbs and grasses such as wild oat, filaree, curly dock, barley, and dog fennel. Approximately 15 acres of the project area is occupied by levees and maintenance roads. The area is frequented by killdeer, American bittern, dowitcher, great blue heron, mallard,

sora, marsh hawk and kestrel, and raccoon. Filling would result in the destruction of the existing mixed seasonal-wetland and lowland-grassland vegetation. The potential for establishment of upland vegetation and associated wildlife species exists, but due to the composition of the fill material and the nature of Acme's operations, the value of the filled area to wildlife would be negligible.

The Service commented on the work described in the subject public notice on June 24, 1977 and January 26, 1979. Only a preliminary HEP analysis was conducted prior to preparation of those comments. We have since conducted a more comprehensive analysis in coordination with representatives of the California Department of Fish and Game, National Marine Fisheries Service, and the Corps of Engineers. The existing habitat types were classified as seasonal-wetland, lowland-grassland, and miscellaneous. The results of our analysis are presented in the following table.

Planning Segment	<u>Acres</u>		<u>Habitat Unit Value</u>			Total Habitat Units
	Existing	Post-Project	Existing	Post-Project	Change	
<u>Fill Area</u>						
Seasonal-Wetland	91	0	31	0 ^{1/}	-31	-2821
Lowland-Grassland	95	0	29	0	-29	-2755
Misc. (levees, roads, C.C. pipeline alignment)	15	15	10	10	0	0
<u>Upland Area</u>						
Fill/Grassland	0	186	0	10	+10	+1860

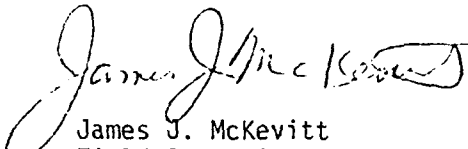
As seen, our analysis indicates a loss of 2821 habitat units of seasonal-wetland and 2755 habitat units of lowland-grassland for a total loss of 5576 habitat units. While upland-fill/grassland shows a gain of 1860 habitat units, these units are not interchangeable with those of other types. Were we dealing with a water-dependent project, it would be acceptable to compensate for the loss of 5576 habitat units of mixed seasonal-wetland and lowland-grassland vegetation by acquiring and managing a minimum of 185 acres offsite (5576 habitat units ÷ 30 mean habitat unit value). Management required to raise the wildlife carrying capacity would depend on the characteristics of the site selected, but

^{1/} Denotes the conversion of one habitat to another

could include such habitat development practices as adding circulation channels, seeding and planting marsh vegetation, encouraging preferred plant species by removing competing ones, creating waterfowl loafing and nesting islands, establishing open water areas and mudflats for shorebirds, manipulating water levels, and creating a buffer zone by constructing perimeter levees and fences.

The Service would not object to issuance of a permit for a 50-acre fill provided the applicant supplies evidence that such filling is necessary to allow time for establishment of a new centralized waste site, and provided the habitat loss due to filling is compensated. Compensation could be accomplished onsite by restoring tidal action to one acre of project land for every acre filled. Our supporting rationale is that restoring tidal action to an acre of mixed seasonal-wetland and lowland-grassland would increase its habitat unit value from 30 to 60.

Sincerely,



James J. McKeivitt
Field Supervisor

cc: EPA, San Francisco
NMFS, Tiburon
NMFS, Terminal Island
Dir., CDF&G, Sacramento
Reg. Mgr., CDF&G, Reg. III, Yountville
Central Contra Costa County Sanitary District
Applicant

Acme Hill Corp.

PRESIDENT

Boyd M. Olney, Jr.

SECRETARY - TREASURER

George Navone

VICE PRESIDENT

Angelo F. ...

DIRECTORS

Bart Bisco

Silvio Garaventa, Jr.

September 10, 1980

Colonel Paul Bazilwich, Jr.
San Francisco District
U. S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105

Dear Colonel Bazilwich:

We appreciated the opportunity to meet with you, your staff, and other interested parties on August 12, 1980 regarding permit application No. 12517-10.

We have made good progress in developing the details of a special mitigation plan, but we have not completed the real estate transactions.

We have completed a Memorandum of Understanding with the Department of Fish and Game; a copy is enclosed for your information. We intend to discuss this matter with representatives of the Fish and Wildlife Service as soon as we have finalized the plans for some specific parcel(s).

We would like to meet with you again to discuss this matter further if you think it would be helpful in arriving at your decision.

Sincerely,

ACME HILL CORPORATION

Boyd M. Olney, Jr.

Boyd M. Olney, Jr.
President

EMO:db
Enclosure

Colonel Paul Basilwich, Jr.

2

September 10, 1980

CC:

US T&WS, Sacramento

US NOAA, Tiburon

US EPA, S. F.

CA RWQCE, Oakland

CA DF&G, Yountville

Assemblyman Daniel Boatwright, Sacramento

Congressman George Miller, Martinez

Supervisor Nancy Fadden, Martinez

This Memorandum of Understanding between the Acme Fill Corporation and the State of California Fish and Game Department is entered into in response to the July 14, 1980 Memorandum from the Secretary of the Resource Agency to the Director of California Department of Fish and Game and to the August 28, 1980 letter from the Corps of Engineers District Engineer to representatives of Acme Fill Corporation regarding Corps Public Notice 12517-10.

This understanding is intended to provide the parties involved with an understanding of what mitigation parameters have been agreed to between the Department and the Corporation and the status of the negotiations to accomplish the mitigation.

Recitals

- A) WHEREAS, Acme Fill landfill constitutes a critical segment of the Contra Costa County and the State of California Solid Waste Management program and continued operation is in the public interest.
- B) WHEREAS, the area of Acme Fill approved by the State Solid Waste Management Board for continued operation is presently diked-off historical wetland which has the potential to be restored to permanent wetlands. This restorable area measures approximately 156 acres. The area is now protected from inundation from floods or tidal action by levees constructed by the Corps of Engineers and maintained by the Contra Costa County Flood Control District.
- C) WHEREAS, Contra Costa County has proposed to provide a new access road to the landfill which will displace 4 acres of seasonal wetlands.
- D) WHEREAS, dredged material from the maintenance of the Walnut Creek Flood Control project can be utilized in the fill cover operations of the Acme Fill landfill.

NOW, THEREFORE, it is mutually agreed by and between Fish and Game and the Corporation as follows:

1. Mitigation lands to be acquired will not currently be subject to tidal action but can be restored to wetland habitat. Such restoration to wetlands status may or may not be the responsibility of the Corporation depending on the management needs of the property.
2. Because land acquisition negotiations are underway for several parcels, any one of which will fulfill the above requirements, it is deemed inappropriate to disclose the precise parcels at this time, although said parcels have been identified in writing by both parties.
3. One hundred sixty (160) acres, deeded to the Department, of any one of the parcels referred to in paragraph 2 will constitute adequate mitigation for the loss of wetlands involved in B and C above.

Boyd M. Olney, Jr.

Acme Fill Corporation
Boyd M. Olney, Jr.
President

Brian Hunter

Department of Fish and Game
State of California
Brian Hunter

9-10-80
Date

9-10-80
Date

BIRD SPECIES OBSERVED IN THE SHELL MARSH AND VICINITY

Horned Grebe	Greater Yellowlegs
Eared Grebe	Lesser Yellowlegs
Western Grebe	Dowitcher spp.
Pied-billed Grebe	Least Sandpiper
White Pelican	Western Sandpiper
Double-crested Cormorant	Dunlin
Great Egret	Northern Phalarope
Snowy Egret	Common Snipe
Cattle Egret	Western Gull
Great Blue Heron	Glaucous-winged Gull
Green Heron	California Gull
Black-crowned Night Heron	Ring-billed Gull
American Bittern	Mew Gull
Mallard	Herring Gull
Pintail	Forsters Tern
American Widgeon	Rock Dove
Shoveler	Mourning Dove
Cinnamon Teal	Belted Kingfisher
Green-Winged Teal	Red-shafted Flicker
Wood Duck	Black Phoebe
Greater Scaup	Tree Swallow
Lesser Scaup	Rough-winged Swallow
Common Goldeneye	Barn Swallow
Bufflehead	Cliff Swallow
Ruddy Duck	Scrub Jay
Turkey Vulture	Marsh Wren
White-tailed Kite	Mockingbird
Marsh Hawk	Water Pipit
Red-tailed Hawk	Loggerhead Shrike
Golden Eagle	Starling
American Kestrel	Yellow-rumped Warbler
California Quail	House Sparrow
Ring-necked Quail	Western Meadowlark
Sora Rail	Red-winged Blackbird
Common Gallinule	Tri-colored Blackbird
American Coot	Brewer's Blackbird
American Avocet	House Finch
Black-necked Stilt	American Goldfinch
Black-bellied Plover	Lesser Goldfinch
Killdeer	Savannah Sparrow
Marbled Godwit	White-crowned sparrow
Spotted Sandpiper	Lincoln Sparrow
Willet	Song Sparrow

Source: Helen and Jerry Gentile; 1/7/79
Malcolm J. Sproul; 11/2/79, 11/9/79

From: Contra Costa County. Draft EIR Industrial Access Road, January 1980.

APPENDIX F
CIRCULATION AND TRAFFIC

	<u>PAGE</u>
Level of Service and Capacity Index	F-1
Capacity Index	F-2

LEVEL OF SERVICE
AND
CAPACITY INDEX

Intersection analyses are based on Transportation Research Board Circular 212 which is an update of the 1965 "Highway Capacity Manual". In this January, 1980, Circular, the various Levels of Service "A" through "F" are based on the amount of delay experienced by vehicles that pass through an intersection. The average delay is calculated for all vehicles, including both those that stop and those that do not stop at the intersection. For example, if the average delay is 35.0 seconds per vehicle, then the intersection provides Level of Service "D" as shown below.

Level of Service "A" represents the least delay and Level "F" represents the greatest delay. Generally, drivers consider Level of Service "D" to represent the greatest delay acceptable. Thus, Level "D" represents 100% of acceptable capacity in the Capacity Index. The Capacity Index ranges from under 68% of acceptable for Level of Service "A" to over 112% of acceptable for Level of Service "F".

In the table below, "Level of Service", "Average Delay", and "Capacity Index" are compared with the "Sum of Critical Volumes" from Circular 212.

LEVEL OF SERVICE	AVERAGE DELAY (SECONDS PER VEHICLE)	SUM OF CRITICAL VOLUMES	CAPACITY INDEX
A	0.0-16.0	1-825	1-67
B	16.1-22.0	826-965	68-79
C	22.1-28.0	966-1100	80-90
D	28.1-35.0	1101-1225	91-100
E	35.1-40.0	1226-1375	101-112
F	40.1 or greater	1376+	113+

CAPACITY INDEX

INTERSECTION: Waterfront/I-680 S.B. On/Off ramp

CONDITION : A.M. & P.M. Peak Hours

INDEX : 94-LOS D AMPK - w/o dump 95-LOS D with dump
53-LOS A PMPK - w/o dump
58-LOS A " - with dump-existing traffic

Vehicle Movements

<u>By Direction</u>	<u>AM / PM HOURLY VOLUME</u>	<u>AM / PM ASSIGNED HOURLY VOLUME PER LANE</u>	<u>AM / PM HOURLY VOLUME OF CONFLICT MOVEMENTS*</u>
Eastbound right turn	150/500		
Eastbound	(10) 100/550 (15)	(5) 125/525 (10)	/525 (10) [15]
Eastbound left turn	-		
Southbound right turn	-		
Southbound	-		
Southbound left turn	-		
Westbound right turn	-		
Westbound	(10) 550/160 (15)	(10) 550/160 (15)	[15] (10) 550
Westbound left turn	(30) 90/ 40 (40)	(30) 90/ 40 (40)	/40 (40) [55]
Northbound right turn	(10) 190/ 60 (15)	(10) 190/ 60 (15)	
Northbound	-		
Northbound left turn	600/ 90	600/ 90	600/90

SUM OF CRITICAL VOLUMES [20] (15) (75) [105]
TOTAL INDEX (SUM X 100/1,225) (95) (95) 94/53 (58) (59)

<u>ES:</u>	<u>LEVEL OF SERVICE</u>	<u>SUM OF CRITICAL VOLUMES</u>	<u>CAPACITY INDEX</u>
	A	1-825	1-67
	B	826-965	68-79
	C	966-1100	80-90
	D	1101-1225	91-10
	E	1226-1375	101-11
	F	1376+	113+

Computation based on critical movement analysis of the January 1980 Highway Capacity Manual update (TRB Circular 212).

* Generally the greater of movements 2 + 9 vs. 3 + 8 & 5 + 12 vs. 6 + 11.
May also include certain right turn volumes.

() Added by Project - Existing - Total Vehicles

[] Added by Project - 1995 - " "

[] = Added by Project assuming 2.5 car equivalents per truck.

CAPACITY INDEX

INTERSECTION: Waterfront/I-680 N.B. on/off ramps
CONDITION : A.M. & P.M. Peak Hour
INDEX : 52-LOS A - AMPK w/o project
 55- " - " + project-existing traffic
 30-LOS A - PMPK w/o project
 34- " - " + project-existing traffic

Vehicle Movements

<u>By Direction</u>	<u>HOURLY VOLUME</u>	<u>ASSIGNED HOURLY VOLUME PER LANE</u>	<u>HOURLY VOLUME OF CONFLICT MOVEMENTS*</u>
Eastbound right turn	90/420	90/420	
Eastbound	(20) 200/190 (30)	(20) 200/190 (30)	/190 (30) [40]
Eastbound left turn	-	-	
Southbound right turn	-	-	
Southbound	-	-	
Southbound left turn	-	-	
Westbound right turn	-	-	
Westbound	(40) 170/ 90 (55)	(40) 170/ 90 (55)	[55] (40) 170/
Westbound left turn	(10) 40/ 70 (15)	(10) 40/ 70 (15)	/70 (15) [20]
Northbound right turn	(45) 10/ 10 (50)	(45) 10/ 10 (50)	
Northbound	-	-	
Northbound left turn	470/110	470/110	470/110

[80]' (60)' (70)' [90]'
 SUM OF CRITICAL VOLUMES [55] (40) 640/370 (45) [60]
 TOTAL INDEX (SUM X 100/1,225) [57] (55) 52/30 (34) (35)

<u>LEVEL OF SERVICE</u>	<u>SUM OF CRITICAL VOLUMES</u>	<u>CAPACITY INDEX</u>
A	1-825	1-67
B	826-965	68-79
C	966-1100	80-90
D	1101-1225	91-100
E	1226-1375	101-112
F	1376+	113+

Computation based on critical movement analysis of the January 1980 Highway Capacity Manual update (TRB Circular 212).

* Generally the greater of movements 2 + 9 vs. 3 + 8 & 5 + 12 vs. 6 + 11.
 May also include certain right turn volumes.

() Added by Project - Existing - Total Vehicles

[] Added by Project-1995 - " "

[]' Added by Project assuming 2.5 car equivalents per truck.

APPENDIX G
ECONOMIC APPENDIX

"Costs of Other Methods of Disposal", Economics Report prepared by Reed V. Schmidt, Consulting Economist and Submitted to Torrey & Torrey, Inc. for the Joint Environmental Impact Report/Environmental Impact Statement Acme Fill Corporation, 24 March 1982. pp. 42-58

COSTS OF OTHER METHODS OF DISPOSAL

For the purpose of this EIR/EIS three methods of disposal other than landfilling are considered: 1) waste reduction, 2) material recovery and recycling and 3) waste-to-energy project and composting. General cost estimates are made for each method and are based on data collected from programs currently being conducted in the County similar to those discussed in this EIR/EIS and those proposed by several governmental agencies.

Waste Reduction

The cost of a public information program to emphasize the need for people to reduce their generation of solid wastes would depend upon the level of effort that the County, Acme, or other organizations would want to make. A relatively small program, such as inserting announcements telling how to reduce solid wastes with collectors' monthly bills to their customers and other public information (brochures, pamphlets, etc.) would

cost between \$20,000 and \$30,000. Partners for Change recommended an extensive public awareness and education program, which was estimated to cost \$75,000 (1980 dollars).

Material Recovery and Recycling

Cost estimates on operating a material recovery and recycling facility are based upon the experience and cost information of E.C.ology Recycling Center in El Cerrito; a County Public Works Department staff report (March 1982) on the feasibility of curbside collection in central County; a planning report (November 1981) on the West Contra Costa County Regional Recycling Program; and Partners for Change: "A Scenario for Recycling in Contra Costa", (December 1980), prepared by the County's Community Services Department.

First, a brief description of E.C.ology Recycling Center, an on-going and successful recycling program in El Cerrito, is provided as general background. E.C.ology is a multi-material processing center for the reclamation of glass, aluminum, tin, newspaper, mixed paper, cardboard, magazines, oil, wine bottles, and scrap metal. Material for processing are obtained through five programs: purchase("buy-back"), curbside collection, donations (drop-off), satellite, and commercial business pickup. E.C.ology runs weekly collection service in El Cerrito, Kensington, and Albany, all three containing a total population of about 43,000, as well as special collections for city offices and businesses, a large condominium complex,

and outlying cities. The curbside collection in El Cerrito, which requires separated materials, has obtained a 50 percent participation level (90 to 100 tons per month). E.C.ology processes approximately 500 tons per month. It is operated by the City of El Cerrito through its Community Services Department. The staff at E.C.ology consist of six full-time employees and six part-time workers. The State Department of Rehabilitation places also handicapped workers at E.C.ology. The City of El Cerrito provides some in-kind services, such as land, maintenance to equipment, and administrative overhead.

An important factor in a successful operation of a material recovery and recycling center is high participation in a program by generators of solid wastes. In order to have significant participation requires a buyback program where the center purchases from patrons, material, such as newspaper, aluminum, tin, bimetal. A curbside collection system is needed to further encourage household participation. The key to financial feasibility are market prices for recycled material. However, prices are set in the market place and are beyond the control of a center, as they are determined by external economic events. Many markets are cyclical in nature, for example, the market for newspapers. While other markets are highly competitive, such as the market for high quality office paper, where small, private recyclers have entered.

For the purpose of the cost analysis of a recycling process center for central County, it is assumed that there is a

buyback program and curbside collection in five central County cities. Further the process center is assumed to be located where the Contra Costa Community Recycling Center is, and is operated as a non-profit organization. The Center, which opened in April 1981, is in Pacheco, near the Central Sanitary District's wastewater treatment plant.

First, there is a separate analysis of a curbside collection program. In March 1982 staff of the Public Works Department of Contra Costa County updated the curbside collection portion of a recycling feasibility study.* Table 14 shows the results of the analysis of curbside collection in five cities in central County. These cities to be included in a program are Martinez, Concord, Walnut Creek, Pleasant Hill, and Clayton. The analysis was performed for different participation percentages by households. Table 14 shows the analysis for 50 percent and 25 percent participation.

For curbside collection it is assumed that construction costs for a processing center would be \$449,000. Collection vehicles are estimated to cost approximately \$27,000 a vehicle. It is estimated to operate a curbside pickup program would require 16 employees and 7 collection trucks with 50 percent participation and 10 employees and 4 collection trucks with 25 percent participation.

*Communities Services Department, Contra Costa County, Partners for Change, December 1980.

TABLE 14
CURBSIDE COLLECTION
FIVE CITIES IN CENTRAL CONTRA COSTA COUNTY

	<u>P A R T I C I P A T I O N</u>	
	<u>50%</u>	<u>25%</u>
<u>AMOUNT RECOVERED</u>		
Tons per day	32	16
Tons per year ^{a/}	7,700	3,800
<u>REVENUES</u> (\$21.00 per ton)	\$162,000	\$ 80,000
<u>EXPENSES</u>		
Annualized Capital Costs - Processing Ctr.	66,000	66,000
Annualized Capital Costs - Collection Vehic.	46,000	26,000
O&M - Processing Ctr.	225,000	156,000
O&M - Collection Vehicles	466,000	309,000
Public Awareness	<u>50,000</u>	<u>50,000</u>
	853,000	607,000
<u>DEFICIT</u>	(\$691,000) (\$527,000)	
Deficit per ton	\$ 90	\$ 139
Subsidy per Household (61,000 households)	\$11/year	\$9/year

a/ Collection: 20 days per month. (20 x 12 x tons per day, and then rounded).

SOURCE: Public Works Department, Contra Costa County, March 1982.

Table 14 shows estimates of annual expenses. Capital costs are amortized using a 12 percent interest rate and varying service lives for structures and equipment. Operation and maintenance (O&M) expenses include labor costs, benefits, supplies, etc. Revenues are based on current market prices for glass, newspaper, tin cans, aluminum cans, and wine bottles and the experience of E.C.ology Center. The average revenue per ton of material recycled is net revenue: less transportation costs to material buyers. Collection is assumed to be five days a week, or an average of 20 days per month.

As revealed in Table 14 curbside collection in central County would probably result in a deficit in the order of \$90 to \$139 per ton. This could require a subsidy from households in the five cities of \$9 to \$11 per year.

With cost mitigations, this subsidy could be reduced by half to \$5-\$6 per year. Table 15 presents this computation and estimates of revenues and expenses of a curbside collection program with cost mitigations. The cost mitigations used in Table 15 include: an increase in average net revenue per ton to \$30, franchise fees, interest free loans, a grant for collection vehicles, lower labor costs due to "workfare" or other subsidy, administrative support from public agencies, and lower collection vehicle driver costs.

TABLE 15
CURBSIDE COLLECTION
FIVE CITIES IN CENTRAL CONTRA COSTA COUNTY
WITH COST MITIGATIONS

	P A R T I C I P A T I O N	
	50%	25%
<u>AMOUNT RECOVERED</u>		
Tons per day	32	16
Tons per year ^{a/}	7,700	3,800
<u>REVENUES</u> (\$30.00 per ton)	\$231,000	\$114,000
<u>FRANCHISE FEES</u>	70,000	70,000
<u>EXPENSES</u>		
Annualized Capital Costs - Processing Ctr.	30,000	30,000
Annualized Capital Costs - Collection Vehic.	-0-	-0-
O&M - Processing Ctr.	175,000	126,000
O&M - Collection Vehs.	393,000	267,000
Public Awareness	<u>50,000</u>	<u>50,000</u>
	648,000	473,000
<u>DEFICIT</u>	(\$347,000)	(\$289,000)
Deficit per ton	(\$45)	(\$76)
Subsidy per household (61,000 households)	\$6/year	\$5/year

a/ Collection: 20 days per month. (20 x 12 x tons per day, and then rounded).

SOURCE: Public Works Department, Contra Costa County, March 1982.

Turning to other programs that could be offered at a regional recycling center means examining a processing facility, which handles buy-back, donations, commercial high grade office paper, and satellite programs. Revenue and cost estimates are shown in Table 16 for two possible facilities offering these programs: 50 tons per day (TPD) and 77 tons per day (TPD). Partners for Change recommended a 50 TPD processing facility for central County, which would also serve as a multi-material drop-off center. ABAG's recycling simulation posits that a central County recycling center could divert 77 TPD of residential/commercial solid wastes from Acme Fill.

Revenues in Table 16 are estimated by using recent market prices and the sales experience of E.C.ology. Expenses are based on financial data provided by E.C.ology and cost information from the County's Public Works Department. Capital costs for a processing center (excluding any portion related to curbside collection) are estimated to be \$609,000 for a 50 TPD facility and \$1,177,000 for a 77 TPD facility.

Operation of a processing center having buy-back, donations, commercial and satellite programs would result in a deficit of approximately \$11 per ton (see Table 16). With a cost mitigation, in-kind services being provided by a governmental agency in the form of no capital costs, then the deficit would shrink to \$2.50 per ton.

TABLE 16
BUY-BACK, DONATIONS, COMMERCIAL-HIGH GRADE OFFICE PAPER,
AND SATELLITE PROGRAMS
CENTRAL CONTRA COSTA COUNTY

	<u>Dollars</u> <u>Per Ton</u>	<u>50-TPD</u> <u>Center</u>	<u>77-TPD</u> <u>Center</u>
Amount Recovered			
Tons per Year		10,500 ^{a/}	20,300 ^{b/}
<u>REVENUES</u>	\$77.50	\$814,000	\$1,573,000
<u>EXPENSES</u>			
Annualized Capital Costs -- Processing Center	8.50	89,000	172,000
Labor and Benefits	25.00	262,000	507,000
Material Purchases (Buy-Back)	45.00	473,000	914,000
Other	<u>10.00</u>	<u>105,000</u>	<u>203,000</u>
	88.50	929,000	1,796,000
<u>DEFICIT</u>	(\$11.00)	(\$115,000)	(\$ 223,000)
<u>MITIGATION</u>			
No annualized capital Costs: In-kind services provided by a Government Agency	8.50	89,000	172,000
Deficit	(\$2.50)	(\$26,000)	(\$ 51,000)

a/ 50 TPD x 7 x 52, less curbside collection of 7,700 (50% participation).

b/ 77 TPD x 7 x 52, less curbside collection of 7,700 (50% participation).

SOURCES: Based upon data supplied by E.C.ology Recycling Center
and Public Works Department, Contra Costa County,
July 1981 - March 1982. Torrey & Torrey, Inc.

A regional material recovery and processing center in central County would more than likely offer all programs (including curbside collection). The magnitude of costs and revenues associated with a comprehensive regional center would depend upon its size and the degree of household participation in curbside collection. Capital costs of 50 TPD and 77 TPD centers with 50 percent participation in curbside collection would range from \$1,250,000 to \$1,820,000. Combining the results shown in Tables 14 and 16, revenues and expenses (without any cost mitigations) would be approximately:

	<u>Comprehensive Regional Recycling Center</u>	
	<u>50 TPD Center</u>	<u>77 TPD Center</u>
	(no cost mitigations)	
Revenues	\$ 976,000	\$1,735,000
Expenses	<u>1,782,000</u>	<u>2,649,000</u>
Deficit	(\$806,000)	(\$914,000)
Deficit per Ton ^{a/}	(\$44)	(\$33)

^{a/} Divide deficit by TPD = TPD x 7 x 52.

With cost mitigations, revenues and expenses would change accordingly and the deficit per ton would decrease:

	<u>Comprehensive Regional Recycling Center</u>	
	<u>50 TPD Center</u>	<u>77 TPD Center</u>
	(with cost mitigations)	
Revenues & Franchise Fees	\$1,115,000	\$1,874,000
Expenses	<u>1,488,000</u>	<u>2,272,000</u>
Deficit	(\$ 373,000)	(\$ 398,000)
Deficit per Ton	(\$20)	(\$14)

In summary, a comprehensive recycling center in central County, with a multi-material processing facility and

curbside collection, could be implemented, but it more than likely would operate at a deficit. Under the assumptions used in the analysis, the amount of deficit could vary from as low as \$14 per ton (with cost mitigations) to as high as \$44 per ton (no mitigations).

Waste-to-Energy And Composting

Central Sanitary District is examining the possibility of a waste-to-energy project to incinerate solid waste to produce electricity.* It is also looking at the possibility of incinerating sludge produced by the District's wastewater treatment system. In January 1981 the District initiated a feasibility and predesign engineering study of the waste-to-energy projects. It is expected to be completed in March 1982.

Two separate projects have been identified as being capable of being implemented. The projects are independent of each other. The two projects are briefly described as follows:

Title 1 would retrofit one existing sludge-burning furnace at the treatment plant for starved air combustion of sludge cake, using refuse-derived gaseous fuel from two modular combustion units both capable of burning municipal solid waste (MSW).

Title 1 Project would handle 120 to 260 TPD of

*Experiences of refuse, mass burning plants in other parts of the country have had limited successes. These plants show a proclivity to difficulties - both in technology and finances.

solid wastes and incinerate all District 1 sludge.*

The project could be expanded to produce excess electricity. It is estimated to cost \$25 million to build and would employ 24 full-time employees. A tipping fee associated with Title 1 is unknown.

Title 2 would provide two 450 TPD capacity mass burning waterwall furnace/boiler systems and a 20 megawatt steam turbine electric generator. Title 2 would incinerate 884 TPD of solid wastes. It does not provide for sludge incineration. It would produce excess electricity for sale to PG&E. Capital costs to construct Title 2 would be approximately \$165 million (1986 dollars). It would employ 34 full-time employees. A net tipping fee of \$12.11 per ton (1988 dollars) is estimated in the first full year of operation in 1988.

Both projects use mass burning technology and no processing of the wastes would be necessary before incineration. Title 2 supposes a 85 percent availability factor: the facility would not be operational 15 percent of the time because of maintenance. It further assumes that waste bypassed, while the facility is not operational, would be disposed at Acme Fill for a fee, as well as residue ash (100 TPD) from the incinerators.

Title 2 is estimated to have total capital costs of \$165,145,000 in 1986 dollars (mid-point of construction). Table 17 lists a

*Currently, the County Public Works Department estimates 100 TPD of dry solids. The District is considering changing its wastewater treatment procedures, as a result dried sludge may be reduced to 50 TPD. It is in the design stage, and a construction date is not known.

TABLE 17
CAPITAL COSTS
CENTRAL CONTRA COSTA SANITARY DISTRICT
WASTE-TO-ENERGY PROJECT
TITLE 2
(1986 Dollars, Mid-Point of Construction)

<u>ITEM</u>	<u>AMOUNT</u>
Equipment and Construction	\$ 77,125,000
Engineering, Legal, and Administration	12,100,000
Contingency	7,650,000
Rolling Stock	376,000
Finance and Issuance Costs	5,538,000
Interest During Construction Start-up	37,021,000
Debt/Equity Reserve Fund	17,225,000
Contingency Reserve Fund	4,110,000
Tipping Fee Stabilization	<u>4,000,000</u>
 TOTAL CAPITAL COSTS	 \$ 165,145,000

SOURCES: Central Contra Costa Sanitary District.
Public Works Department, Contra Costa County.

breakdown of the capital costs.

Financing is assumed to be 80 percent revenue bonds and 20 percent equity and to have an effective interest rate on the revenue bonds of 10. percent, with levelized 21 annual payments. Sources of funding are shown below:

Revenue Bonds	\$113,555,000
Equity	28,389,000
Interest Earnings	22,851,000
Grant and Operating Fund	<u>350,000</u>
Total Sources	\$165,145,000

Annual costs (1988 dollars) in the first year of operation in 1988 are estimated to total \$24,325,000 and are divided as follows:

Equity	
Debt/Service	\$ 17,225,000
Labor	1,631,000
Utilities	1,384,000
Maintenance & Chemicals	1,084,000
Residue Disposal (to Acme)	1,389,000
General & Administration	946,000
Contingency & Miscellaneous	<u>665,000</u>
Total Costs	\$ 24,325,000

Annual rates of inflation used for the cost estimates were 12 percent (1981 to 1985) and 8 percent (1986 to 2008).

Annual revenues in 1988 dollars are contemplated to be:

Electricity Sales	\$ 16,862,000
Interest Earnings on Reserve Fund	<u>1,490,000</u>
Total Revenues	\$ 18,352,000

The revenue estimate presumes that the sales price of energy to PG&E increases at the same rate as inflation. The 1981 price of electricity was assumed to be 6.2 cents per kilowatt-hour.

Comparing the annual revenues with annual costs shows a net annual deficit of almost \$6.0 million in 1988:

Annual Revenues	\$ 18,352,000
Annual Costs	<u>24,325,000</u>
Deficit	(\$ 5,973,000)

This loss calculates to be \$21.79 per ton (1988 dollars).*

A tipping fee equal to this amount per ton would be required to offset the net annual deficit; however, the inclusion of the tipping fee stabilizer in the bond issue to subsidize the gross tipping fee would in effect lower the tipping fee. This is done to keep costs of burning solid wastes competitive with costs of landfilling. The net tipping fee is the result of offsetting the gross tipping fee with the tipping fee stabilizer. For 1988 the net tipping fee would be \$12.11 per ton (see Table 18 for calculation).

The 1988 net tipping fee of \$12.11 per ton is expected to be comparable to the cost of landfilling in 1988. The cost of \$12.11 per ton discounted to 1982 dollars, using an annual discount rate of 10 percent, is \$6.84 per ton -- which is within the range of what the current disposal costs (per ton) at Acme Fill and other landfills in Contra Costa County are estimated to be. Over the time period of Title 2 operation, it is estimated that the tipping fee would decrease and could be eventually eliminated. Central Sanitary District states that the Title 1 project can be implemented by them; however, it judges that the Title 2 project is beyond

*\$5,973,000 divided by (85% of 884 TPD x 365 = 274,261 TPY).

TABLE 18
 CALCULATION OF NET TIPPING FEE
 CENTRAL CONTRA COSTA SANITARY DISTRICT
 WASTE-TO-ENERGY PROJECT
 TITLE 2
 (1988 Dollars, First Year of Operation)

<u>Item</u>	<u>Annual Amount</u>	<u>Per Ton^{a/}</u>
Gross Tipping Fee (Net Annual Deficit)	\$ 5,973,000	\$ 21.79
Tipping Fee Stabilizer	<u>-2,656,000</u>	<u>- 9.68</u>
Net Tipping Fee	\$ <u>3,317,000</u>	\$ <u>12.11</u>

a/ Using 274,261 TPY (85% x 884 TPD x 365).

SOURCES: Central Contra Costa Sanitary District.
 Public Works Department, Contra Costa County.

the financing capability of the District. The District has proposed that the County consider the possibility of implementing the Title 2 project.

(Composting of organic solid wastes, especially garden wastes, would be a relatively small part of other methods to land-filling and would more than likely be part of any material recovery and recycling program. Composting of sludge was not considered. Separate cost estimates were not made for a composting program in central County.)

APPENDIX H
PUBLIC HEALTH AND SAFETY APPENDIX

	<u>PAGE</u>
1. Landfill vectors	H-1
2. Permits Prohibiting Open Burning, Acme Landfill	H-2

Pests or vectors frequently present at landfills include:

a. Flies

Housefly, Musca domestica; Stablefly or "Biting Housefly",
Stomoxys calcitrans; Flesh Fly, Sarcophaga sp.; Greenbottle or
Garbage Fly, Phaenicia sp.; Black Blowfly, Phormia regina.

b. Mosquitos

Yellow Fever Mosquito, Aedes aegypti; Brown House Mosquito,
Culex pipiens.

c. Rodents

Norway Rat, Rattus norvegicus; climbing rat, Rattus rattus;
House Mouse, Mus musculus; various native rodents; wood rats,
white-footed mice, etc.

d. Gulls and Other Flocking Birds

e. Miscellaneous Pests or Vectors

Cockroaches, dogs and cats, raccoons, bears.

Permits Prohibiting Open Burning
Acme Landfill
Contra Costa County, California

1. Contra Costa County, Board of Supervisors
LUP 615-60
Issued 2 December 1958

Condition 6) Burning garbage, oil or other combustible
refuse will not be permitted

2. Contra Costa County Solid Wasts Facilities
Permit 07-AA-022
Issued 21 May 1979
Revised: 4 December 1981
State Solid Waste Management Board

APPENDIX I

RESOURCE CONSERVATION AND RECOVERY APPENDIX

	<u>PAGE</u>
1. Recycling Simulation Existing Situation Plus Central County Regional Center	I-1
2. Recycling Simulation Central and West County Regional Centers	I-2
3. Recycling Simulation, Central and West County Regional Centers Plus Limited East County Regional Center	I-3
4. Estimated Acme Fill Life Expectancy (No Energy Recovery or Recycling)	I-4
5. Effects of Recycling and Waste-to-Energy Projects on Acme Fill	I-5

TABLE 6.5. RECYCLING SIMULATION, EXISTING SITUATION PLUS
CENTRAL COUNTY REGIONAL CENTER

COLLECTION AREA	% REDUCTION	LANDFILL	RESIDENTIAL/ COMMERCIAL		
			WASTE RECEIVED NO RECYCLING (TONS PER DAY) ¹	TONS RECYCLED (PER DAY)	PERCENTAGE REDUCTION
32. El Cerrito	20	Acme	777	77	10
44. Kensington	20	West County	312	15	5
34. Concord	20	Contra Costa			
39. Pleasant Hill	20	Waste	52	2	4
37. Martinez	15	Pittsburg	33	-	-
46. Port Chicago/ Shore Acres	10	TOTALS	1,174	94	8
40. Walnut Creek	10				
47. Clayton	5				
48. San Ramon	5				
36. Lafayette	2				
38. Orinda-Moraga	2				
35. Diablo	2				
45. Clyde	2				
50. Briones	1				

1. Does not include import from other counties, 1980 values.

Source: ARAG computer program, 1980.

TABLE 6-6. RECYCLING SIMULATION
CENTRAL AND WEST COUNTY REGIONAL CENTERS

COLLECTION AREA	% REDUCTION	LANDFILL	RESIDENTIAL/ COMMERCIAL WASTE RECEIVED NO RECYCLING ¹ (TONS PER DAY)	TONS RECYCLED (PER DAY)	PERCENTAGE REDUCTION
32. El Cerrito	20	Acme	777	78	10
44. Kensington	20	West County	312	38	12
34. Concord	20				
29. Pleasant Hill	20	Contra Costa Waste	52	2	4
37. Martinez	15	Pittsburg	33	-	-
46. Port Chicago/ Shore Acres	10				
40. Walnut Creek	10	TOTALS	1,174	118	10
47. Clayton	5				
48. San Ramon	5				
36. Lafayette	2				
38. Orinda-Moraga	2				
35. Diablo	2				
45. Clyde	2				
50. Briones	1				
53. Richmond/ San Pablo	10				
49. Rodeo	5				
31. Crockett	5				

1. Does not include import from other counties, 1980 values.

Source: ABAG computer program, 1980.

TABLE 6-7. RECYCLING SIMULATION, CENTRAL AND WEST COUNTY REGIONAL CENTERS PLUS LIMITED EAST COUNTY REGIONAL CENTER

COLLECTION AREA	% REDUCTION	LANDFILL	RESIDENTIAL/ COMMERCIAL WASTE RECEIVED NO RECYCLING (TONS PER DAY) ¹	TONS RECYCLED (PER DAY)	PERCENTAGE REDUCTION
32. El Cerrito	20	Acme	777	79	10
44. Kensington	20	West County	312	38	12
34. Concord	20	Contra Costa Waste	52	3	6
39. Pleasant Hill	20	Pittsburg	33	3	9
37. Martinez	15	TOTALS	1,174	128	11
46. Port Chicago/ Shore Acres	10				
40. Walnut Creek	10				
47. Clayton	5				
48. San Ramon	5				
36. Lafayette	2				
38. Orinda-Moraga	2				
35. Diablo	2				
45. Clyde	2				
50. Briones	1				
33. Richmond/ San Pablo	10				
49. Rodeo	5				
31. Crockett	5				
32. Pittsburg	7				
51. Antioch	7				
52. Oakley	5				
41. Brentwood	2				
53. West Pittsburg	7				

1. Does not include import from other counties, 1980 values.

Source: ABAG computer program, 1980.

ESTIMATED

TABLE 8-6. ACME FILL LIFE EXPECTANCY
(No Energy Recovery or Recycling)¹

SCENARIO (See previous page for description)	1980		1985		1990		1995 ³	
	REMAINING CAPACITY (TONS)	%FULL ²	REMAINING CAPACITY (TONS)	%FULL	REMAINING CAPACITY (TONS)	%FULL	REMAINING CAPACITY (TONS)	%FULL
#1	832,000	0	Filled in 100 1981					
#2	1,829,000	0	Filled in 100 1983					
#3	4,179,000	0	1,552,000	63	Filled in 100 1987			
#4	5,176,000	0	2,549,000	51	Filled in 100 1989			
#5	5,923,000	0	3,296,000	44	325,000	95	Filled in 100 1990	
#6	8,531,000	0	5,904,000	31	2,933,000	66	Filled in 100 1994	

1. Includes imports from Benicia

2. Percentage calculated using 1980 as base year, 0.0% full

3. In 1993 wastes from the Contra Costa Waste Sanitary Landfill and Pittsburg Landfill are diverted to Acme Fill

SOURCE: ABAG computer program, 1980

TABLE 8-7. EFFECTS OF RECYCLING AND WASTE-TO-ENERGY PROJECTS ON ACME FILL¹

ALTERNATIVE	1980 REMAINING CAPACITY (Tons)	% FULL ²	1985 REMAINING CAPACITY (Tons)	% FULL	1990 REMAINING CAPACITY (Tons)	% FULL	1995 REMAINING CAPACITY (Tons)	% FULL	2000 REMAINING CAPACITY (Tons)	% FULL
Base Case (no resource recovery)	8,531,000	0	5,904,000	31	2,933,000	66	Filled in 1994	100		
Recycling ³ Simulation	8,531,000	0	6,049,000	29	3,221,000	62	Filled in 1995	100		
Waste-to-Energy Project in 1985	8,531,000	0	5,904,000	31	4,393,000	49	2,490,000	71	Filled in 1999	100
Recycling and ⁴ Waste-to-Energy	8,531,000	0	6,049,000	29	4,682,000	45	2,923,000	66	Filled in 2000	100

1-5

1. Assume capacity of Acme Fill is 8,531,000 tons, Scenario #6 Table 8-6.
2. Percentage calculated by using 1980 as base year, 0.% full.
3. Recycling simulated is in Table 6-7, 79 tons per day.
4. Both above cases combined.

SOURCE: ABAG computer program, 1980

APPENDIX J

INITIAL STUDY

SUMMARY OF IMPACTS

Water: Potential for pollution of both surface water and groundwater. Earth: Liquefaction potential is high, potential for creep and rupture along Concord Fault, potential for inundation due to dam failure, grading may result in water and wind erosion. Plant/Animal Life: Irreversible loss of seasonal wetlands habitat, no rare or endangered species identified on site, probable increase of nuisance animal populations and vectors of disease, in conjunction with landfill operations, (gulls, rats, flies, etc.). Air: Land fill operations could result in the generation of dust and decomposition of refuse may cause odors. Noise: Operation of heavy equipment during landfill operations and truck traffic will increase existing noise levels. Energy/Natural Resources/Hazards: Expenditure of energy in transporting solid wastes to site and within land fill operations will be examined; loss of potentially recyclable material will result in energy use in production of new products as well as increased demand for virgin resources; extraction, transporting, and soil spreading operations will result in energy expenditure; possible danger from spontaneous combustion or explosion; disposal of Group I (hazardous) wastes may endanger public health; project could present danger to trespassers; landfill operations tend to attract vectors of disease, project could affect structural integrity of sewerage and others pipeline or make them inaccessible for repair, Concord Fault traverses site and presents a possibility of creep and surface rupture; production of methane gas in decomposition presents both a hazard and a potential energy resource. Utilities and Public Service: Potential for recreational use upon closure should be explored; fire and emergency plans should be developed; trails routes are located in the area. Transportation/Circulation: Existing access through residential street unsatisfactory, (see EIR (CP 79-70) for proposed alternate access route analysis) truck traffic will create safety hazards at new locations. Housing and Community Development: Vine Hill Neighborhood Preservation Area near site. Aesthetics: Project site bordered by a scenic route (Waterfront Road) and would have an adverse aesthetic impact; removal of existing hills would increase adverse aesthetic impact.

IDENTIFIED IMPACTS

1. Water Waste disposal at the project site could result in pollution of ground water through seepage and surface waters through runoff. Applicant will submit engineering and geologic reports so that a full evaluation of the potential effects of the project can be made.
2. Earth Soil is predominately omni silty clay. The entire project site has a high liquefaction potential. A portion of the project site is located in an Alquist-Priolo Special Studies Zone; the Concord Fault is mapped through the eastern portion of the project site and is capable of surface creep and ground rupture. There may be a danger from Tsunami and seiche (tidal waves). A portion of the site is subject to inundation by dam failure. A full evaluation of the potential effects of the project requires review of engineering and geologic reports prepared for the project.

The project will require considerable grading, related to disposal operations, procurement of cover material and site closure. The applicant will submit grading plans (indicating sequence of fill, elevations and final site configuration), plans for the source and quantity of cover material (and a reclamation plan for the source area, as appropriate) before the environmental effects of the project can be fully evaluated.

3. Plant/Animal Life The project involves filling of a seasonal wetlands habitat; such filling would preclude restoration of the project site to tidal action. Records indicate that no rare or endangered species have been identified on site. The Suisun bay salt marsh harvest mouse, ornate shrew and Suisun song sparrow have been sited nearby, on the north side of Waterfront Road. Project will result in an increase in nuisance animals and vectors of disease which tend to be attracted to such operations. Vegetation on the site is characteristic mixed seasonal wetland and lowland grassland vegetation.
4. Air The project could result in the generation of dust, methane and odors. Residents of the Vine Hill area may be subjected to these increased pollution levels. These effects be cumulative as the quantity of waste disposed increased.

5. Noise The northernmost portion of the project site, along Waterfront Road, is within the 1990, 60 dBA Noise Contour. Operation of heavy equipment during landfill operations will contribute to existing noise levels.
6. Energy/Natural Resources/Hazards Decomposing garbage generates methane, a potential resource and potential explosion hazard. Disposal by landfill results in a loss of recoverable resources through dissipation into landfill of recyclable materials resulting in an increase in demand for new products and their associated energy costs of production. Landfill operations which draw from a large territory increase energy consumption in the transport of wastes over land. Acme regularly receives wastes from more than 15 miles from the proposed site. The use of soils for cover materials requires the expenditures of energy in extraction, transporting and soil spreading operations. Landfill operations may indirectly perpetuate energy wasteful behavior on the part of the population served, by promoting belief that solid waste problems may be resolved by expansion of traditional facilities rather than attempting to alter waste producing behavior by institution of activities such as source separation recycling or source reduction. There is a danger of fire due to spontaneous combustion. The disposal of Group I (hazardous) wastes at the project site could affect public health and safety. The landfill operation will attract vectors of disease to the site (e.g. seagulls, rodents, flies). The characteristics of the landfill facility could pose safety problems to trespassers. Structural integrity of sewerage and other pipelines could be compromised and accessibility for repair impaired by landfill operations.
7. Utilities/Public Services The General Plan indicates a primary bicycle path along Waterfront road and a riding trail along the west side of the Walnut Creek channel. There is the potential for establishment of a recreation facility onsite after the disposal site is closed. This possibility can be explored and carried out with the closure plan.
8. Transportation/Circulation The existing access route to the site is unsatisfactory in that it traverses a narrow residential street. This problem will be exacerbated as the amount of waste disposed at Acme Fill and Industrial Tank increases (See LIR for Access Road CP 79-70).

9. Housing and Community Development The project is located near the Vine Hill Neighborhood Preservation Area. The project site is shown as Heavy Industry in the General Plan and therefore is not considered a potential site for low and moderate income housing.
11. Aesthetics The project site is bordered by a scenic route, Waterfront Road. A landfill operation may be considered an aesthetically offensive site open to public view. Also, residents of the Vine Hill neighborhood have expressed concern with the removal of a low hill east of the neighborhood due to excavation for cover material, resulting in exposure of residences to industrial sights, sounds and odors.
12. Although there is an existing refuse disposal site nearby the proposed project will set a precedent for filling of wetlands in the vicinity.

DISCUSSION

The proposed EIR/EIS will explore alternatives to landfill, alternatives to using the proposed site and alternative to the proposed site development plan.

RW/BF/rnb5c

Contra
Costa
County



Planning Department

Initial Study

OF ENVIRONMENTAL SIGNIFICANCE ACME LANDFILL 200 AC. EXPANSION

File # _____

Concurrent Application Army Corps 138811ES9

Planning Department
Administration Building, N.Wing
Pine & Escobar Streets
Martinez, California 94553

Prepared by Bruce Fitzgerald

Reviewed by Dale Sanders

Date 7.9.81

Date 7/15/81

RECOMMENDATIONS:

() Categorical Exemption (Class) () Negative Declaration ☒ Environment Impact Report Required

() Conditional Neg. Declaration (Owner/Applicant must agree to mitigation in writing)

The Project (May) ~~(Will Not)~~ Have A Significant Effect On The Environment

The recommendation is based on the following (List all items identified as significant):

See attached "Summary of Impacts"

What Changes To The Project Would Mitigate The Identified Impacts (List mitigation measures for any significant impacts and Conditional Negative Declaration).

An Environmental Impact Report / Environmental Impact Statement will be prepared in cooperation with the Army Corps of Engineers to fully analyze the potential impacts of the project and appropriate mitigation measures.

USGS Quad Sheet Port Chicago Zoning Atlas Sheet # E-13 Parcel # 350 - 020 - 010
(portion of)

GENERAL CONSIDERATIONS:

- General Plan considerations (A) Land use designation, (B) Area plan name and (C) Date, (D) Specify any conflicts with proposal): (A) Heavy Industry
(B) Vine Hill-Pacheco Area General Plan Amendment (C) 1975
(D) none
- Zoning district (A) Specify current and (B) Proposed, (C) Specify any conflicts and (D) variances requested): H-I (Heavy Industry) Zone; permit required for refuse disposal in an H-I Zone under Chapter 418-4 of the County Ordinance
- Nature of request or proposed land use: land disposal of Group 2, Group 3 and limited Group 1 wastes (as determined by the California Regional Water Quality Control Board and dredging spoils (dredged material to be used as cover at landfill))
- Site description and existing and neighboring land use: Site is Seasonal wetland on grassland adjacent to existing Acme site, Pacheco Creek / Walnut Creek channel, Winterfont Rd, CRRP, IT hazardous waste processing facility and residential area nearby
- Note any previous applications on the site (if EIRs recommended, listing EIRs prepared for nearby projects): existing refuse disposal site permit (615-60) covers part of the project site (see map); EIR on Industrial Access Rd. (CP 79-70)
- Does it appear that any feature of the project will generate significant public concern? (Nature of concern): ☒ yes ☐ no ☐ maybe
disposal site near residential area; dump traffic on residential streets; Concord fault mapped on site; Source of Cover material
- Will the project require approval or permits by other than a County agency? Agency name(s): ☒ yes ☐ no
Army Corps of Engineers; State Department of Health Services; Air Quality Maintenance District; Approval of executive officer of the Bay Region Regional Water Quality Control Board
- Is the project within the Sphere of Influence of any city? (Name) Martinez

ENVIRONMENTAL IMPACTS ANALYSIS

S=Significant N=Negligible C=Cumulative N= None if not

1. Water. Will the project result in:

- a) Is any portion of the project within a Flood Hazard Area identified as protected by levees on FEMA (9-1-7) maps? (Indicate location of surface or ground water, if any, in project area)
- b) Increased runoff or alteration to drainage patterns and streams?
- c) Erosion of or sedimentation in a body of water?
- See attached "Identified Impacts"*

2. Earth. (Consider the Seismic Safety Element) Will the proposal result in or be subject to:

- a) Is any portion of the project within an Alquist-Priolo Act Special Studies Zone? (If yes, date County Geologist notified 7-8-81)
- b) Potentially hazardous geologic or soils conditions on or immediately adjoining the site. (slides, springs, erosions, liquefaction, earthquake faults, consider prime soils, slope, septic tank limitations). Cite any geologic or engineering reports. (County Geologist consulted?)
- c) Grading (consider height amount, steepness and visibility of proposed slopes; consider effect of grading on trees, creek channels and ridge tops)(Are there any grading plans?)
- See attached "Identified Impacts"*

3. Plant/Animal Life.

- a) Will there be a reduction or disturbance to any habitat for plants and animals? (including removal or disturbance of trees)
- b) Will the Project affect the habitat of any rare, endangered or unique species located on or near the site?
- c) What vegetation (habitat) types exist on the site (give relative % or proportions if significant)? List habitat types. approximately 50% seagrass, 20% wetland, 40% lowland/grassland and 10% misc./disturbed
- See attached "Identified Impacts"*

4. Air. Will the Project result in deterioration of existing air quality, including creation of objectionable odors, or will future project residents be subjected to significant pollution levels?

5. Noise. Will the project result in:

- a) Is any portions of the project within the 1990, 60 dBA Noise Contour? (check Noise Element at 1000 scale maps)
- b) Increases from existing noise levels?
- See attached "Identified Impacts"*

6. Energy/Natural Resources/Hazards (Consider General Plan, Safety and Seismic Safety Elements). Will the projects result in:

- a) Any additional consumption of energy?
- b) Affect the potential use, extraction, conservation or depletion of a natural resource?
- c) Increase risk of explosion, release of hazardous substances or other dangers to public health and safety?
- See attached "Identified Impacts"*

7. Utilities and Public Service. Will the project:

- a) Require alteration or addition to or the need for new utility systems (including sphere of influence or district boundary change; water, sewer, solid waste)?

- b) Result in the need for new or expansion of the following services: fire and police protection, schools, parks and recreation, roads, flood control or other public works facilities, public transit or governmental services (include changes to sphere of influence)? S N C NO U
☐ ☐ ☐ ☐ ☒
- c) Affect recreational opportunities (consider General Plan Recreation Element-Trails Plans)?
See attached "Identified Impacts"
☒ ☐ ☐ ☐ ☐
8. Transportation/Circulation. (Consider the Major Roads Plan) Will the project result in:
- a) Additional traffic generation or increase in circulation problems (consider road design, access, congestion, parking and accident potential)?
☒ ☐ ☐ ☐ ☐
- b) Special transportation considerations (waterborne, rail, air or public transportation systems and parking facilities)?
Alternate access route, hazardous waste trans. routes
☐ ☐ ☐ ☐ ☒
- c) Increase in commuting to and from local community?
See attached "Identified Impacts"
☐ ☐ ☐ ☐ ☒
9. Housing and Community Development. (Consider Housing Element). Is the project:
- a) Located within a Neighborhood Preservation Area?
☐ YES ☒ NO
- b) Is there an opportunity for construction of low and moderate income housing?
☐ YES ☒ NO
See attached "Identified Impacts"
10. Cultural Resources.
- a) Review by the Regional Clearinghouse? (their recommendation)?
☒ YES ☐ NO
Date 7-10-81
- b) Any nearby County Historic Sites (Consider Historical Resources Inventory) none nearby
11. Aesthetics. (Consider the Scenic Routes Element) Will the project obstruct any public scenic vista or view, create an aesthetically offensive site open to public view, or produce new light or glare?
See attached "Identified Impacts"
☒ YES ☐ NO
12. Is this project a growth-inducing action (encourage additional requests for similar uses) or set a precedent in the area?
See attached "Identified Impacts"
☒ YES ☐ NO
13. Mandatory Findings of Significance. (A "yes" answer on any of the following questions requires preparation of an EIR)
- a) Does the project have the potential to degrade the quality of the environment, or curtail the diversity in the environment?
☒ YES ☐ NO
- b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?
☒ YES ☐ NO
- c) Does the project have impacts which are individually limited, but cumulatively considerable?
☒ YES ☐ NO
- d) Does the project have environmental impacts which will cause substantial adverse effects on human beings, either directly or indirectly?
☒ YES ☐ NO

Discussion:

See attached sheets

AD-A118 367 TORREY AND TORREY INC SAN FRANCISCO CA
ACME LANDFILL EXPANSION. APPENDICES. (U)
1982

F/G 13/2

UNCLASSIFIED

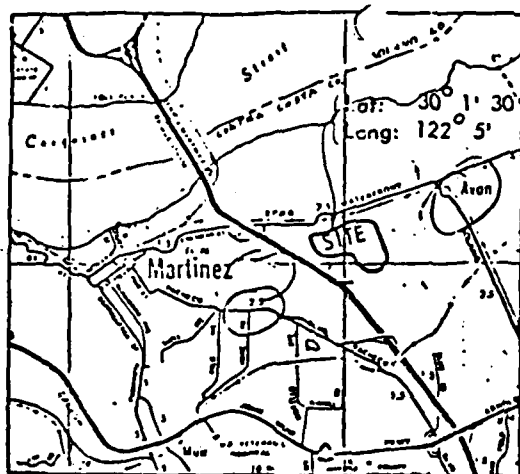
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3 of 3

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1982



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VICINITY MAP

0 1 2
Scale in Miles

PLAN - ACME LANDFILL
NORTH PARCEL

200 0 200 600 800
Scale in Feet

EXPLANATION

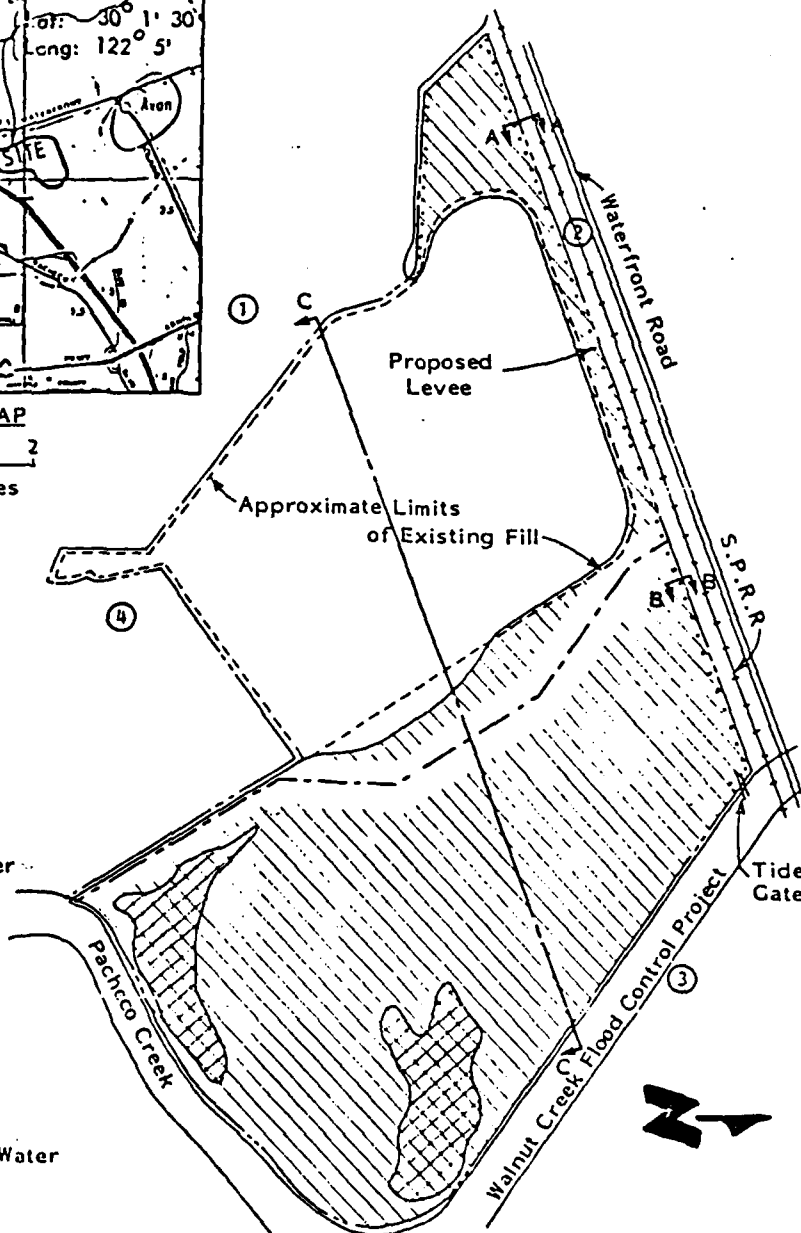
- Exempt Area
- Area to be filled
- CCCSD 72" Sewer
- Plane of MHW
- Property Line
- Limits of Refuse Fill
- Proposed Levee

Purpose: Sanitary Landfill

Datum: Mean Lower Low Water

Adjacent Property Owners:

- ① Shell Oil Company
- ② Southern Pacific Transportation Company
- ③ Contra Costa County Flood Control District
- ④ I.T. Corporation



PROPOSED DIKE CONSTRUCTION
AND SANITARY LANDFILL
ADJACENT TO PACHECO CREEK
MARTINEZ, CONTRA COSTA COUNTY

APPENDIX K
APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT
AND
PERMIT FORM WITH GENERAL CONDITIONS

The Department of the Army permit program is authorized by the Federal Water Pollution Control Act (P.L. 85-624) and Section 103 of P.L. 92-542. The Act requires that no person shall discharge any pollutant from a point source into navigable waters of the United States, the discharge of dredged or fill material into navigable waters, or the discharge of any pollutant from a nonpoint source into navigable waters, without first obtaining a permit from the Department of the Army. The permit is required for the purpose of dumping it into navigable waters. Information provided by the applicant is used to evaluate the permit application. Information in the application is confidential and its disclosure is voluntary; however, the data requested are necessary to evaluate the permit application and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed and a permit will not be issued.

The original drawings or good reproducible copies which show the location and character of the proposed activity must be submitted to this application (see sample drawings and checklist) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

1. Application number (To be assigned by Corps) <div style="text-align: center; font-weight: bold;">13881E59</div>	2. Date <div style="text-align: center; font-weight: bold;">11 March 1981</div> <div style="display: flex; justify-content: space-around; font-size: small;"> Day Mo. Yr. </div>	3. For Corps use only. <div style="text-align: center; font-weight: bold;">16 March 1981</div>
4. Name and address of applicant. Acme Fill Corporation P. O. Box 1108 Martinez, California 94533 Att: Mr. Boyd M. Olney Telephone no. during business hours A/C (415) 685-4711 A/C ()	5. Name, address and title of authorized agent. Harding-Lawson Associates P. O. Box 578 Novato, California 94948 Att: Mr. Frank Boerger Telephone no. during business hours A/C (415) 892-0821 A/C ()	
6. Describe in detail the proposed activity, its purpose and intended use (private, public, commercial or other) including description of the type of structures, if any to be erected on fills, or pile or float supported platforms, the type, composition and quantity of materials to be discharged or dumped and means of conveyance, and the source of discharge or fill material. If additional space is needed, use Block 14. (also see attached continuation sheet) <p style="margin-left: 40px;">The Acme Landfill is the disposal area for all of Central Contra Costa County's residential, commercial and industrial solid wastes and for several adjacent communities. Acme Landfill is expected to be the main disposal site for this area for most of the remainder of the century. It is operating under a Class II-1 permit from the California Regional Water Quality Control Board (CRWQCB) which</p>		
7. Names, addresses and telephone numbers of adjoining property owners, lessees, etc., whose property also adjoins the waterway. North: Southern Pacific Transportation Co., 1 Market St., San Francisco, Ca South: IT Corporation, P. O. Box 831, Martinez, Ca 94553 Martinez Gun Club - Arthur Road, Martinez, Ca 94553 East: Contra Costa County Flood Control Dist., 255 Glacier Dr., Martinez, Ca West: Shell Oil Company, P. O. Box 711, Martinez, Ca 94553		
8. Location where proposed activity exists or will occur. <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Address: <u>End of Arthur Road</u> Street, road or other descriptive location <u>Martinez</u> In or near city or town <u>Contra Costa, California 94533</u> County State Zip Code </div> <div style="width: 50%;"> Tax Assessors Description: (If known) <div style="display: flex; justify-content: space-around; font-size: small;"> 380 Map No. 020 Subdiv. No. 010 Lot No. </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Sec. Twp. Rge. </div> </div> </div>		
9. Name of waterway at location of the activity.		

10. Date activity is proposed to commence: July 1, 1981

Date activity is expected to be completed: 1994

Is any portion of the activity for which authorization is sought now complete? ☐ YES ☒ NO
If answer is "Yes" give reasons in the remark section. Month and year the activity was completed: _____
Indicate the existing work on the drawings.

12. List all approvals or certifications required by other federal, interstate, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

<u>Issuing Agency</u>	<u>Type Approval</u>	<u>Identification No.</u>	<u>Date of Application</u>	<u>Date of Approval</u>
CRWQCB	Waste Discharge requirements	37-76	September 1973	April 1976
Local Enforcement Agency	Solid Waste Facilities Permit	07-AA-002		May 1979

13. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?

☐ Yes ☒ No (If "Yes" explain in remarks)

14. Remarks or additional information.

15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Boyd M. Olney, Jr.
Signature of Applicant or Authorized Agent
Boyd M. Olney, Jr.

This application must be signed by the applicant; however, it may be signed by a duly authorized agent (named in Item 5) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

18 U. S. C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT

Part 6 - Description of the Proposed Activity

(Continuation)

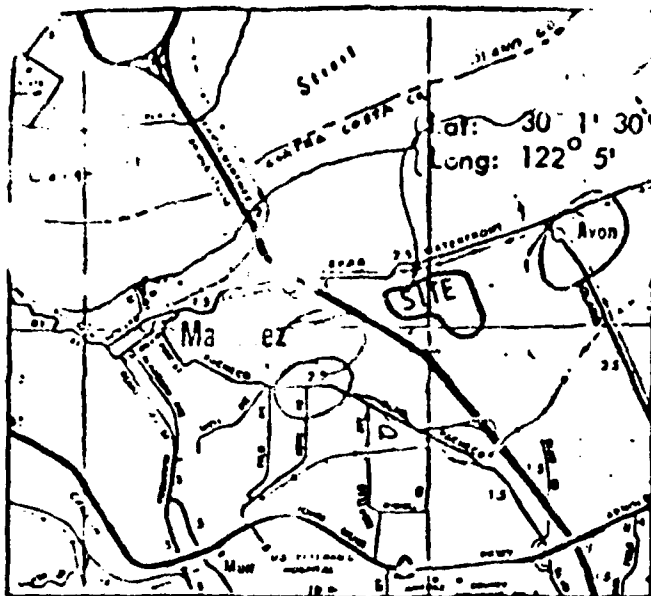
allows the landfill to accept all Groups 2 and 3 wastes along with certain hazardous Group 1 wastes. In addition, in accordance with the California Solid Waste Management regulations, the landfill is permitted by the Local Enforcement Agency, Contra Costa County Health Department.

The site is isolated from the tidal action of Suisun Bay by the embankment of Waterfront Road and levees of the Walnut Creek Flood Control Project, which provides protection against a 100-year flood. A tide gate in the northeast corner of the property provides for surface drainage, at present, of the area outside the proposed dike.

Acme Landfill requests a permit to fill approximately 180 acres of land with compacted solid wastes and the dikes necessary to contain leachates from reaching the waters of the State.

In addition, Contra Costa County requests, as a part of this same permit, permission to dispose of dredged material from the maintenance of the Walnut Creek and Pacheco Creek flood control channels. These materials (approximately 250,000 cubic yards) will be deposited on approximately 60 acres of the area every 3 to 5 years; they will be used as cover material for the landfill after drying.

An off-site mitigation package to offset potential losses of wildlife habitat has been agreed to by the California Department of Fish and Game; the package includes at least 160 acres of lands that will be managed to improve their values as wetland habitat.



VICINITY MAP

0 1/2 1 2
Scale in Miles

PLAN - ACME LANDFILL
NORTH PARCEL

0 200 400 600 800
Scale in Feet

EXPLANATION

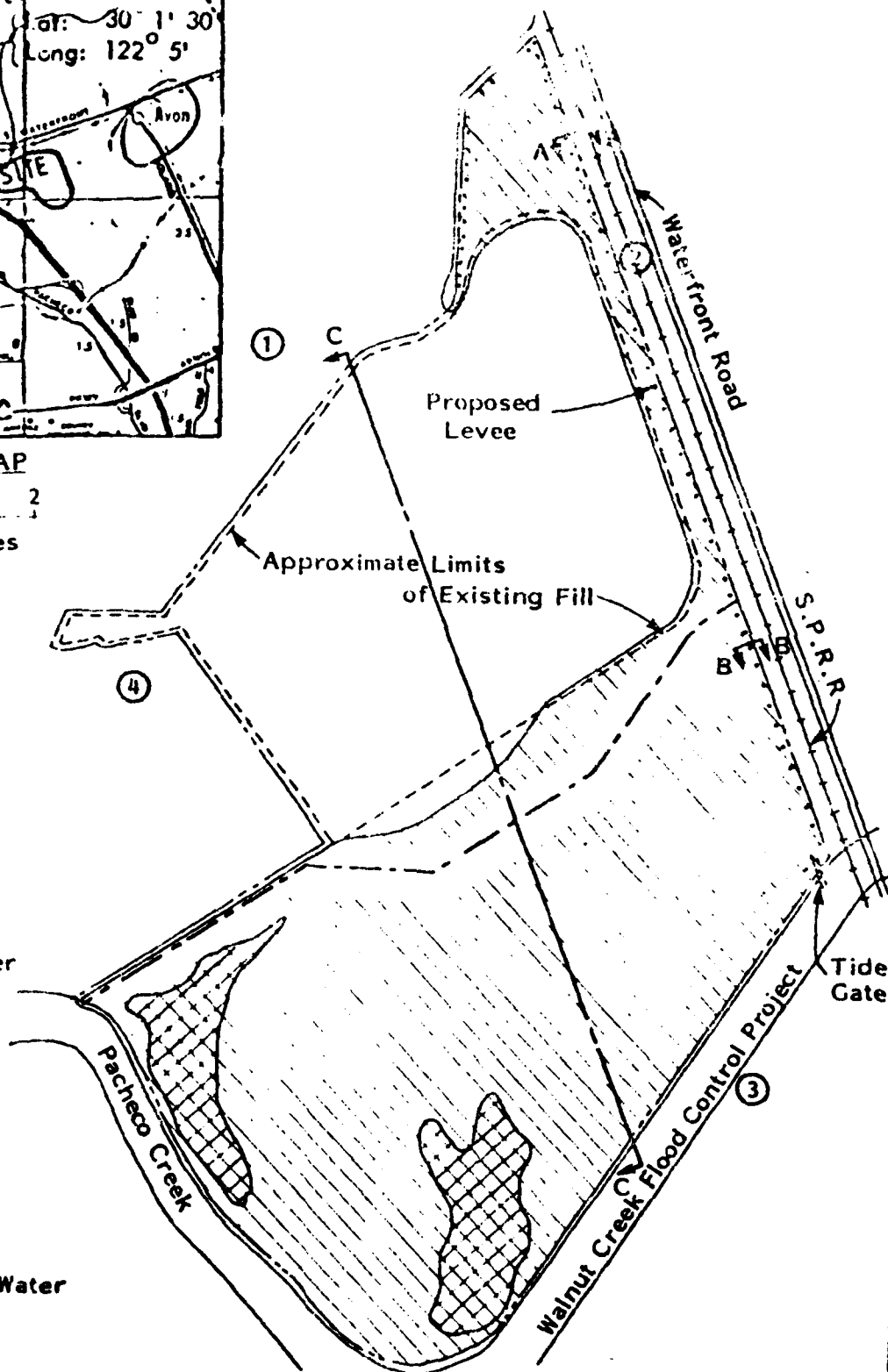
- Exempt Area
- Area to be filled
- CCCSD 72" Sewer
- Plane of MHW
- Property Line
- Limits of Refuse Fill
- Proposed Levee

Purpose: Sanitary Landfill

Datum: Mean Lower Low Water

Adjacent Property Owners:

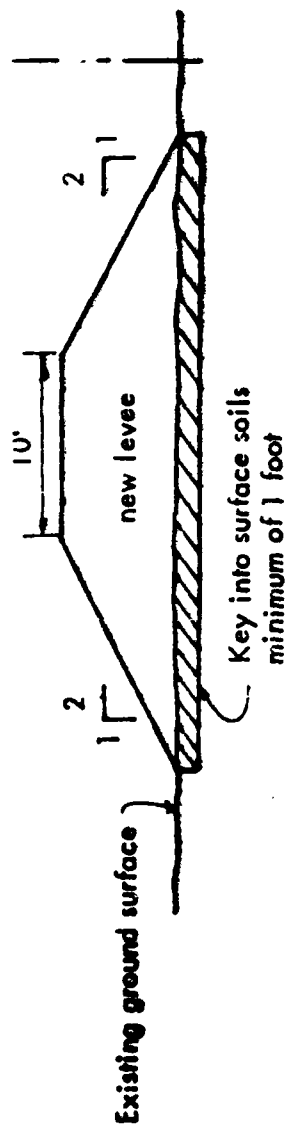
- ① Shell Oil Company
- ② Southern Pacific Transportation Company
- ③ Contra Costa County Flood Control District
- ④ I.T. Corporation



PROPOSED DIKE CONSTRUCTION
AND SANITARY LANDFILL
ADJACENT TO PACHECO CREEK
MARTINEZ, CONTRA COSTA COUNTY
Sheet 1 of 3
3/11/81

ELEVATION IN FEET (MLW)

+10
+5
0
-5

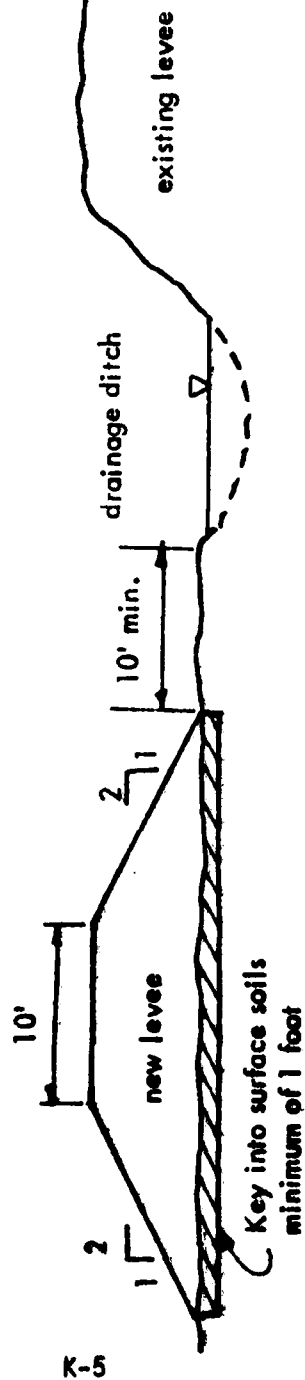


TYPICAL CROSS SECTION A-A

Scale: 1" = 10' Horizontal & Vertical

ELEVATION IN FEET (MLW)

+10
+5
0
-5

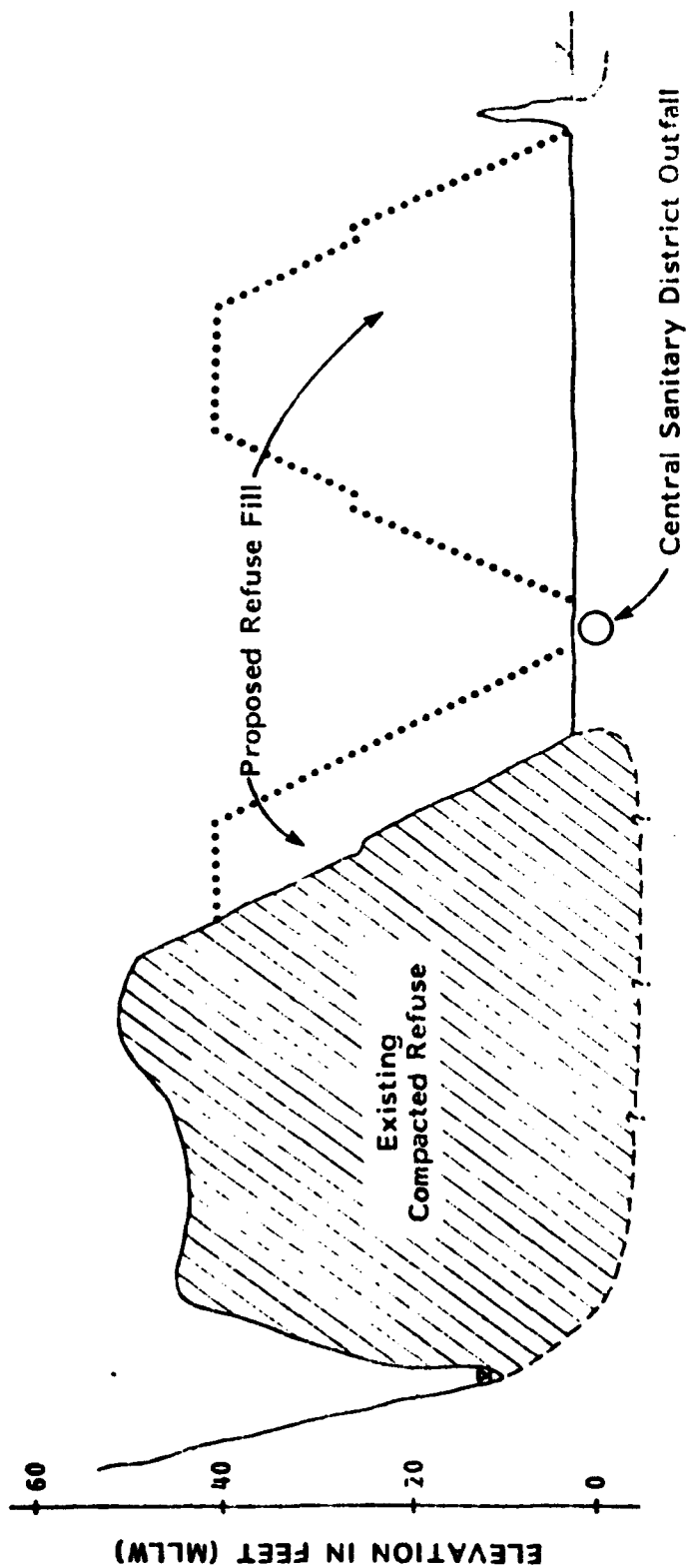


TYPICAL CROSS SECTION B-B

Scale: 1" = 10' Horizontal & Vertical

PROPOSED DIKE
CONSTRUCTION AND
SANITARY LANDFILL
ADJACENT TO
PACHECO CREEK
MARTINEZ, CONTRA
COSTA COUNTY

Sheet 2 of 3 3/11/81



CROSS SECTION C-C

1" = 600' Horizontal
1" = 20' Vertical

PROPOSED DIKE CONSTRUCTION
AND SANITARY LANDFILL
ADJACENT TO PACHECO CREEK
MARTINEZ, CONTRA COSTA COUNTY
Sheet 3 of 3

Application No. _____

Name of Applicant _____

Effective Date _____

Expiration Date (If applicable) _____

DEPARTMENT OF THE ARMY PERMIT

Referring to written request dated _____ for a permit to:

() Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403);

() Discharge dredged or fill material into waters of the United States upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Federal Water Pollution Control Act (86 Stat. 816, P.L. 92-500);

() Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532);

is hereby authorized by the Secretary of the Army:
to

in

at

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings: give file number or other definite identification marks.)

subject to the following conditions:

I. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit, and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

ENG FORM 1 JUL 77 1721 EDITION OF 1 APR 74 IS OBSOLETE.

ASR 11462-8831

b. That all activities authorized herein shall, if they involve, during the construction or operation of the work authorized herein, the discharge of any pollutant into the waters of the United States or ocean waters, be at all times consistent with applicable Federal, State, and local water quality standards, prohibitions, pretreatment standards and other requirements of the Federal Water Pollution Control Act of 1972 (P.L. 92-500, 86 Stat. 815), the Marine Protection, Research and Sanctuaries Act of 1972 (P.L. 92-532, 86 Stat. 1052), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge during its construction or operation of any pollutant into the waters of the United States, the authorized activity shall, if applicable, comply with applicable water quality standards or revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, nor endanger the critical habitat of such species.

e. That the permittee agrees to make every reasonable effort to prosecute the construction or operation of the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife, and natural environmental values.

f. That the permittee agrees that he will prosecute the construction or work authorized herein in a manner so as to minimize any degradation of water quality.

g. That the permittee shall permit the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

h. That the permittee shall maintain the structure or work authorized herein in good condition and in accordance with the plans and drawings attached hereto.

i. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

j. That this permit may be summarily suspended, in whole or in part, upon a finding by the District Engineer that immediate suspension of the activity authorized herein would be in the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate (1) the extent of the suspension, (2) the reasons for this action, and (3) any corrective or preventative measures to be taken by the permittee which are deemed necessary by the District Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of this notice. Within ten days following receipt of this notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether his permit should be reinstated, modified or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the permit will either be reinstated, modified or revoked.

k. That this permit may be either modified, suspended or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest. Any such modification, suspension, or revocation shall become effective 30 days after receipt by the permittee of written notice of such action which shall specify the facts or conduct warranting same unless (1) within the 30-day period the permittee is able to satisfactorily demonstrate that (a) the alleged violation of the terms and the conditions of this permit did not, in fact, occur or (b) the alleged violation was accidental, and the permittee has been operating in compliance with the terms and conditions of the permit and is able to provide satisfactory assurances that future operations shall be in full compliance with the terms and conditions of this permit, or (2) within the aforesaid 30-day period, the permittee requests that a public hearing be held to present oral and written evidence concerning the proposed modification, suspension or revocation. The conduct of this hearing and the procedures for making a final decision either to modify, suspend or revoke this permit in whole or in part shall be pursuant to procedures prescribed by the Chief of Engineers.

l. That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

n. That the permittee shall notify the District Engineer at what time the activity authorized herein will be commenced, as far in advance of the time of commencement as the District Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not started on or before _____ day of _____, 19____ (one year from the date of issuance of this permit unless otherwise specified) and is not completed on or before _____ day of _____, 19____, (three years from the date of issuance of this permit unless otherwise specified) this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

q. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition t hereof, he must restore the area to a condition satisfactory to the District Engineer.

r. That if the recording of this permit is possible under applicable State or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

s. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

t. That this permit may not be transferred to a third party without prior written notice to the District Engineer, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

ii. Special Conditions: (Here list conditions relating specifically to the proposed structure or work authorized by this permit):

The following Special Conditions will be applied to this permit:

STRUCTURES IN OR AFFECTING NAVIGABLE WATERS OF THE UNITED STATES:

- a. That this permit does not authorize the interference with any existing or proposed navigation project and that the permittee shall be entitled to compensation for damage or injury to the structures or work authorized herein, or to the loss of property or to the interruption of existing or future operations undertaken by the United States in the public interest.
- b. That no attempt shall be made by the permittee to prevent the full and free use by the public of the navigable waters at or adjacent to the activity authorized by this permit.
- c. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.
- d. That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former condition. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.
- e. Structures for Small Boats: That permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of boats moored thereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

MAINTENANCE DREDGING:

- a. That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for _____ years from the date of issuance of this permit (ten years unless otherwise indicated).
- b. That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

✓ **DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES:**

- a. That the discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines established pursuant to Section 404(b) of the FWPCA and published in 40 CFR 230;
- b. That the discharge will consist of suitable material free from toxic pollutants in other than trace quantities;
- c. That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution; and
- d. That the discharge will not occur in a component of the National Wild and Scenic River System or in a component of a State wild and scenic river system.

DUMPING OF DREDGED MATERIAL INTO OCEAN WATERS:

- a. That the dumping will be carried out in conformity with the goals, objectives, and requirements of the EPA criteria established pursuant to Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, published in 40 CFR 220-229.
- b. That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or dumping of the dredged material as authorized herein.

This permit shall become effective on the date of the District Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

PERMITTEE

DATE

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

DATE

DISTRICT ENGINEER,
U.S. ARMY, CORPS OF ENGINEERS

Transferee hereby agrees to comply with the terms and conditions of this permit.

TRANSFEREE

DATE